



U.S. Department of the Interior  
Bureau of Land Management

California Desert District  
Palm Springs - South Coast Resource Area

May 1991



# South Coast Planning Area

## Draft Resource Management Plan and Environmental Impact Statement



Robin Koehn

The Bureau of Land Management is responsible for the balanced management of the Public Lands and their various values so that they are considered in a combination that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield, a combination of uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness, and natural scenic, scientific and cultural values.

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# United States Department of the Interior



BUREAU OF LAND MANAGEMENT  
PALM SPRINGS-SOUTH COAST RESOURCE AREA  
400 S. FARRELL DRIVE, SUITE B-205  
PALM SPRINGS, CALIFORNIA 92262

IN REPLY REFER TO:

1610  
(CA-066.30)

Dear Interested Citizen:

After two years of preparation, the draft Resource Management Plan (RMP) and Environmental Impact Statement (EIS) for public lands in the South Coast Planning Area is ready for your review. This draft document has been sent out to about 1,500 interested citizens.

We would like you to be aware of three announcements which were finalized after the draft document was sent to the printer. Please note these corrections and additions:

- 1) **The final date to receive public comments has been extended until November 15, 1991.** This will ensure a full 90-day public input period.
- 2) **Five public meetings are scheduled in order to receive comments on the draft RMP alternatives and the EIS:**

6:30 p.m., Wednesday, September 11, 1991  
Hemet City Council Chambers  
450 E. Latham Ave.  
Hemet, California

6:30 p.m., Thursday, September 12, 1991  
Ramona Community Center Auditorium  
434 Aqua Lane  
Ramona, California

6:30 p.m., Tuesday, September 17, 1991  
Barrett Cafe Meeting Room  
1020 Barrett Road, Barrett Junction  
San Diego County, California

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6:30 p.m., Wednesday, September 18, 1991  
Walnut School  
625 N. Walnut  
La Habra, California

6:30 p.m., Thursday, September 26, 1991  
Sierra Vista Junior High School  
19425 West Stillmore Street  
Canyon Country, California

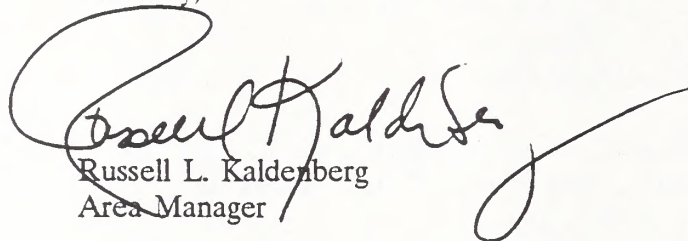
- 3) Our Palm Springs office will be moving to a new location in August. If you send your comments after August 15th, please send them to the new address:

Bureau of Land Management  
Palm Springs-South Coast Resource Area  
63-500 Garnet Avenue  
P.O. Box 2000  
North Palm Springs, CA 92258-2000

Our phone number will also be changing after August 15th from (619) 323-4421 to (619) 251-0812.

We have prepared and distributed the document because we sincerely want to consider your comments as we prepare the final Resource Management Plan. We welcome your participation in the review of the draft, and look forward to seeing you at one of the public meetings.

Sincerely,



Russell L. Kaldenberg  
Area Manager



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
CALIFORNIA DESERT DISTRICT OFFICE  
6221 BOX SPRINGS BOULEVARD  
RIVERSIDE, CALIFORNIA 92507-0714



IN REPLY REFER TO:

Dear Reader:

Enclosed for your review and comment is the Bureau of Land Management's Draft Resource Management Plan and Draft Environmental Impact Statement for the South Coast Planning Area. This document outlines a number of alternatives for managing the public lands in this area. The alternatives are designed to resolve the management issues which were identified during the early stages of the planning process.

Comments concerning the Plan and the adequacy of the Draft Environmental Impact Statement will be considered in preparing the Proposed Plan and Final Environmental Impact Statement. Public meetings will be held in July for receiving comments. The dates, times and locations of the public meetings will be announced later.

All comments must be received by October 4, 1991. Please send your comments to:

Area Manager  
Bureau of Land Management  
400 S. Farrell Drive, Suite B-205  
Palm Springs, California 92262

Sincerely,

Gerald E. Hillier  
District Manager



United States Department of the Interior  
Bureau of Land Management  
Washington, D.C. 20250

# South Coast Resource Management Plan and Environmental Impact Statement

DRAFT

Responsible Agency: Bureau of Land Management

Abstract: This Draft Resource Management Plan and Environmental Impact Statement describes and analyzes alternative scenarios, including a no action alternative and the preferred alternative, for managing the BLM-administered public land and resources in the South Coast Planning Area.

For further information contact:

District Manager  
Bureau of Land Management  
6221 Box Springs Boulevard  
Riverside, California 92507  
(714) 653-3264

OR

Area Manager  
Bureau of Land Management  
400 S. Farrell Drive, Suite B-205  
Palm Springs, California 92262  
(619) 323-4421

Comments must be received by: October 4, 1991





**DRAFT**

**SOUTH COAST**

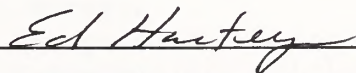
**RESOURCE MANAGEMENT PLAN**

**AND**

**ENVIRONMENTAL IMPACT STATEMENT**

**U.S. DEPARTMENT OF THE INTERIOR**

**BUREAU OF LAND MANAGEMENT**



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STATE DIRECTOR  
CALIFORNIA

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# Summary

## Introduction

This Resource Management Plan is being prepared to guide the management of Bureau of Land Management (BLM) public land in the South Coast Planning Area. The plan covers 129,000 acres of public land and an additional 167,500 acres of federal mineral estate where the surface is privately owned (termed split-estate lands). The 129,000 acres consists of 296 separate parcels scattered throughout portions of five southern California counties: San Diego, Riverside, San Bernardino, Los Angeles and Orange. About 95% of the lands are in San Diego and Riverside Counties.

The existing environment and the challenges for future management of the BLM public lands within this area are shaped by a multitude of needs related to the dynamic social and economic climate. Heavy demands are placed on resources, such as sand and gravel for construction, land for community expansion and landfills, and corridors for utility, transportation, and communication systems. Also needed, however, are viable natural habitat areas for sensitive species, open space, parks and general recreation. Extensive loss of habitat on private land has resulted from past development, with the result that several species have been listed as endangered. Attention is focused on the few most critically affected species. The listing of an individual species, however, is really the recognition of a symptom resulting from an overall loss of biodiversity caused by both direct destruction of habitat on private land and fragmentation into areas too small to be viable for some species. Riverside County is working toward development of a multi-species habitat conservation plan to help maintain biodiversity. Both Riverside and San Bernardino counties are studying the formation of open space districts where public lands would serve as the core. As urban expansion continues in southern California, there will be increasing demand for undeveloped land and the values associated with it .

The general objective of resource management planning is to provide a framework to maximize resource values and the multiple use of the public lands through a rational, consistently applied set of procedures. Resource management plans are designed to guide and control future management actions as well as the development of subsequent and more detailed plans. The major effort for this Resource Management Plan is twofold. One aspect is to address the opportunities to manage the sensitive resources and open space values of these lands, and balance the protection of these resources with potential uses such as recreation and mineral development. The other is to address the potential for improving management effectiveness and efficiency through adjustment of the scattered land ownership pattern.

## Management Area Alternatives

To facilitate the analysis and development of plan alternatives, the planning area has been divided into four separate management areas. The division is generally along county lines which serves as a general geographic reference for identifying where the lands are located. It also allows management areas to be evaluated in the context of local government concerns. The following is a brief summary of the plan alternatives developed for each of the management areas. The sizes of the various areas have been rounded off for convenience.

### San Diego County

The San Diego County Management Area includes 65,000 acres of BLM-administered land, and an additional 74,000 acres of federal mineral split-estate lands in the western portion of the County. Most of these public lands, including the largest parcels, are in the mountainous terrain lying between Interstate Highway 8 and the U.S.-Mexico border. Lands within the management area contain several sensitive plant and animal species and habitats, as well as potential for recreational use opportunities.

The management area does not include the area covered by BLM's Eastern San Diego County Management Framework Plan (MFP), or the area to the north of State Highway 79, which is within the Beauty Mountain Management Area.

Alternative 1 (No Action) and Alternative 2 (Administrative Adjustments), would not designate any Areas of Critical Environmental Concern, and no habitat management areas or special recreation management areas would be identified.

In Alternative 2 (Administrative Adjustments) land disposal and transfer to other agencies, including jurisdictional exchange with the U.S. Forest Service, would be the primary goal.

Alternative 3 (Sensitive Species, Open Space and Recreation), would designate Cedar Canyon as an Area of Critical Environmental Concern (ACEC) for the protection of populations of a sensitive plant species, Mexican flannelbush. The Kuchamaa ACEC, including lands at Tecate Peak and Little Tecate Peak, would be designated for the protection of Native American religious values. Lands in the vicinity of McAlmond Canyon and Hauser Mountain would be identified as a habitat management area, and the Fern Creek and Rainbow Creek parcels would be managed for the protection of riparian values. Increased recreation opportunities would be provided, since all of the public lands in the area south of Interstate Highway 8 would be managed as the Border Mountains Special Recreation Management Area (SRMA). Consolidation of lands to establish an uninterrupted corridor of public land in the Border Mountains area would be a major objective of land tenure adjustments.

Alternative 4 (Use Opportunities) would contain the same ACEC designations as the Preferred Alternative, except that Little Tecate Peak would not be included in the Kuchamaa ACEC. Alternative 4 would include the Border Mountains SRMA, but not the habitat management areas of the Preferred Alternative. As in the Preferred Alternative, consolidation of lands to establish an uninterrupted corridor of public land in the Border Mountains area would be a major objective of land tenure adjustments.

The **Preferred Alternative** for the San Diego County Management Area is Alternative 3.

## **Riverside-San Bernardino County**

The Riverside-San Bernardino County Management Area includes the western portions of these counties which are outside of the California Desert Conservation Area (CDCA). There are approximately 30,000 acres of BLM-administered land and an additional 35,000 acres of split-estate lands with federal minerals. Most of the land is comprised of scattered parcels in Riverside County. A number of these parcels contain habitat for several sensitive species, most notably the Stephens' kangaroo rat (SKR). The largest parcel of public land is located near Poppet Flat, contains 8,000 acres and has potential to provide recreational use opportunities. In San Bernardino County there are 1,000 acres in four parcels located within the Santa Ana River wash. These lands contain populations of two federally endangered plant species, the slender-horned spineflower and the Santa Ana River woolly-star. Some of the lands have potential for various mineral resources, including areas with low or moderate potential for oil and gas and some, such as the Santa Ana River Wash area, are known to contain valuable sand and gravel resources.

In this management area there are several features which apply to all of the alternatives. Two segments of the Santa Margarita River are identified as eligible for possible inclusion into the National Wild and Scenic Rivers System; use of off-highway vehicles on lands adjacent to Canyon Lake is limited; and an existing withdrawal affecting 10,364 acres in the vicinity of Poppet Flat would be modified.

In Alternative 1 (No Action) the Steele Peak area would be managed for SKR habitat and the lands within the Santa Ana River wash would be managed for protection of sensitive plant species populations. Land exchanges would be used to consolidate ownership in the Steele Peak area.

In Alternative 2 (Administrative Adjustments) most lands would be identified for disposal from federal ownership or transfer to other agencies, including jurisdictional exchange with the U.S. Forest Service. Disposal of lands with SKR or sensitive resources would be conditioned on their protection.

Alternative 3 (Sensitive Species, Open Space and Recreation), would designate three ACECs. Stephens' kangaroo rat would be protected in the Steele Peak ACEC and the Santa Ana River Wash ACEC would provide special management for slender-horned spineflower and Santa Ana River woolly-star. The lands within and adjacent to the Santa Margarita Ecological Reserve would also receive designation as an ACEC/Research Natural Area (RNA). In addition, sensitive species habitat would be managed on lands at Oak Mountain, near Valle Vista and in the Badlands area, east of Riverside. Increased recreation opportunities would be provided through the establishment of the Poppet Flat Special Recreation Management Area (SRMA). Land exchanges would be used to consolidate ownership in the areas identified for special management. Disposal of scattered parcels with SKR habitat would be conditioned on their use in exchanges to acquire lands at Steele Peak.

Alternative 4 (Use Opportunities) would have the same ACEC designations except that the Steele Peak ACEC would be smaller in size. Sensitive species habitat would be managed on lands at Oak Mountain and in the Badlands area. The Poppet Flat SRMA would be established as in the Preferred Alternative and a parcel of public land at Canyon Lake would also be managed as an SRMA. As in the Preferred Alternative land tenure adjustments would be primarily for consolidation within the special management areas.

The **Preferred Alternative** for the Riverside-San Bernardino County Management Area is alternative 3.

## **Beauty Mountain**

The Beauty Mountain Management Area is north of State Highway 79, south of the Cahuilla Indian Reservation and west of Anza-Borrego Desert State Park. The management area includes 28,500 acres of BLM-administered public land, located in both Riverside and San Diego Counties. In addition, there are approximately 21,500 acres of federal mineral split-estate lands. Most of these public lands are contained in a few large parcels and form a nearly consolidated block of public land ownership. The lands have value for watershed and wildlife habitat, and also have potential to provide for recreational use. The most notable mineral potential in the management area is for tungsten.

In Alternative 1 (No Action) no ACEC designations or other identification of special management areas would take place. Consolidation of public land ownership would be limited to acquiring the privately owned inholdings within the existing Beauty Mountain Wilderness Study Area (WSA).

Alternative 2 (Administrative Adjustments) would make all lands available for disposal or jurisdictional exchange with the U.S. Forest Service. No ACEC designations or identification of special management areas would take place.

Alternative 3 (Sensitive Species, Open Space and Recreation), would include the designation of two ACECs. The Million Dollar Spring ACEC would encompass 5,800 acres within the eastern portion of the Beauty Mountain WSA and would provide protection of important watershed and riparian values. Johnson Canyon would be designated as an ACEC/Research Natural Area (RNA) for the protection of unique vegetation resources and research opportunities. Wildlife habitat would be enhanced through the identification of a portion of the public land within the management area as a habitat management area, and the establishment of the Beauty Mountain Special Recreation Management Area (SRMA) would increase recreational use opportunities. Land ownership consolidation would be the primary focus of land tenure adjustments.

Alternative 4 (Use Opportunities) would include neither the ACEC designations nor the habitat management area identified in the Preferred Alternative. Opportunities for recreational use would be emphasized through establishment of the Beauty Mountain SRMA. As in the Preferred Alternative, consolidation of public land ownership would be the primary focus of land tenure adjustments.

The **Preferred Alternative** for the Beauty Mountain Management Area is Alternative 3.

## **Los Angeles-Orange County**

The Los Angeles-Orange County management area includes that portion of Los Angeles County outside of the California Desert Conservation Area (CDCA). The area includes approximately 5,500 acres of BLM-administered public land and an additional 36,000 acres of federal mineral split-estate land. Much of the management area has high to moderate potential for oil and gas, and some of the split-estate lands in the Soledad Canyon area contain valuable sand and gravel deposits. Within Orange County there is only one small parcel of BLM-administered public land.

Alternative 1 (No Action), would emphasize administrative adjustments through land disposal and transfer to other agencies. Approximately 1,200 acres would be considered suitable for jurisdictional exchange with the U.S. Forest Service, and the remaining lands considered suitable for disposal. All BLM split-estate lands and surface lands, while they remain under BLM administration, would be available for sand and gravel sales and oil and gas leasing. Certain stipulations would be applied to the new oil and gas leases which cover areas with sensitive species.

Alternative 2 (Administrative Adjustment) is equivalent to Alternative 1 (No Action). Therefore, a separate Administrative Adjustments Alternative was not developed for this management area.

Alternative 3 (Sensitive Species, Open Space and Recreation) would include the acquisition of lands within the Santa Clara River corridor for management of sensitive species, including the unarmored three-spined stickleback. Two parcels traversed by the Pacific Crest National Scenic Trail would be retained and one parcel of 240 acres would be available for jurisdictional exchange with the U.S. Forest Service. Most of the existing land base would be available for disposal, including land exchanges to acquire the Santa Clara River lands. BLM-administered lands would be available for sand and gravel sales and oil and gas leases. Certain stipulations would be applied to the new oil and gas leases which cover areas with sensitive species.

Alternative 4 - (Use Opportunities) would specify acquisition of surface ownership of lands in the Agua Dulce Area to facilitate sale and development of a major sand and gravel deposit. All existing surface lands, however, would be available for disposal from federal ownership with the exception of 1,200 acres which would be suitable for jurisdictional exchange with the U.S. Forest Service. All of the public lands, including the split-estate lands, would be open to oil and gas leasing as well as mineral material sales for sand and gravel. Stipulations for protection of sensitive species habitat would be applied to oil and gas leases.

The **Preferred Alternative** for the Los Angeles-Orange County Management Area is Alternative 1.

Accounting Comparability	Financial Statement Comparability	Tax Comparability
<p>Accounting comparability is the degree to which the financial statements of different companies are prepared using the same accounting principles and practices. This is often measured by the degree of consistency in the use of accounting standards and practices across different companies and countries.</p>	<p>Financial statement comparability refers to the degree to which the financial statements of different companies are prepared using the same accounting principles and practices. This is often measured by the degree of consistency in the use of accounting standards and practices across different companies and countries.</p>	<p>Tax comparability refers to the degree to which the tax systems of different countries are similar. This is often measured by the degree of consistency in the use of tax laws and practices across different countries.</p>
<p>Accounting comparability is important for investors and other stakeholders because it allows them to compare the financial performance of different companies and to make more informed investment decisions. It also helps to reduce the risk of fraud and misstatement.</p>	<p>Financial statement comparability is important for investors and other stakeholders because it allows them to compare the financial performance of different companies and to make more informed investment decisions. It also helps to reduce the risk of fraud and misstatement.</p>	<p>Tax comparability is important for companies and investors because it allows them to compare the tax systems of different countries and to make more informed investment decisions. It also helps to reduce the risk of fraud and misstatement.</p>

**Table S-1. Cumulative Summary of Alternative Impacts**

Environmental Topic	Alternative 1 No Action (Continuation of Present Management)	Alternative 2 Administrative Adjustments
<b>Impacts to Wildlife</b>	<p>Land consolidation would have a slightly positive impact to Stephens' kangaroo rat. Land disposal and subsequent development would have significantly negative impacts on Wright's checkerspot butterfly, moderately negative impacts on California Gnatcatcher and negative but not significant impacts on orange-throated whiptail, Least Bell's Vireo and southwestern pond turtle.</p> <p>Development following land disposal and/or mineral development would have negative but not significant impacts on unarmored three-spined stickleback and California Condor.</p> <p>Development following land disposal and/or mineral development would have moderately negative but not regionally significant impacts on deer and quail habitat, as well as coastal sage scrub and riparian habitat.</p>	<p>Development following land disposal would have significantly negative impacts on Stephens' kangaroo rat and Wright's checkerspot butterfly. It would also have moderately negative impacts on California Gnatcatcher and orange-throated whiptail, impacting a high proportion of habitat on BLM-administered lands.</p> <p>Impacts to unarmored three-spined stickleback, California Condor, Least Bell's Vireo and southwestern pond turtle would be the same as Alternative 1.</p> <p>Development following land disposal and/or mineral development would have negative but not significant impacts on deer and quail (having a high impact relative to habitat on BLM-administered lands within the planning area), and negative but not significant impacts on coastal sage scrub and riparian habitat.</p>
<b>Impacts to Vegetation</b>	<p>Development following land disposal would have negative impacts on populations of Gander's pitcher sage, Palmer's grapplinghook, Parry's tetracoccus, San Diego barrel cactus, San Diego currant, Tecate cypress, Tecate tarplant and variegated dudleya, as well as potential habitat for California orcutt grass, Many-stemmed dudleya, Munz's onion, Nevin's barberry, San Fernando Valley spineflower and San Diego thornmint.</p> <p>Land disposal would also negatively impact Coastal and Valley Freshwater Marsh, South Coast Live Oak Riparian Forest, Southern Interior Cypress Forest, Southern Cottonwood-Willow Riparian Forest, and Southern Willow Scrub communities.</p>	<p>Land disposal and subsequent development would impact populations of the same species as Alternative 1 as well as potential habitat for Cleveland goldenstars, Jacumba locoweed and the species discussed in Alternative 1.</p> <p>Land disposal would also impact the same communities as in Alternative 1, as well as Southern Sycamore-Alder Riparian Forest.</p>

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**Alternative 3  
Sensitive Species,  
Open Space and Recreation**

**Alternative 4  
Use Opportunities**

**Preferred  
Alternative**

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Consolidation/acquisition of land and the prescriptions for ACEC management would have significant positive impacts on Stephens' kangaroo rat and Wright's checkerspot butterfly, highly positive or significantly positive impacts on Least Bell's Vireo habitat, unarmored three-spined stickleback and southwestern pond turtle, and positive but not significant impacts on orange-throated whiptail and California Gnatcatcher. Impacts to California Condor would be the same as for Alternative 1.

Impacts to deer, quail, coastal sage scrub and riparian habitat from land consolidation/acquisitions, vegetation management, and/or ACEC designation would be highly positive relative to habitat on BLM administered lands within the planning area, but would not be regionally significant.

Land acquisitions and management under ACEC designation would have positive impacts on populations of Mexican flannel bush, Nevin's barberry, Payson's jewelflower, Palmer's grapplehook, Santa Ana River woolly-star, slender-horned spineflower and Tecate cypress.

There would also be positive impacts on potential habitat for Munz's onion as well as on South Coast Live Oak Riparian Forest, Southern Interior Cypress Forest, Southern Sycamore-Alder Riparian Forest, and Southern Willow Scrub communities.

Development following land disposal would negatively impact potential habitat for California Orcutt grass, many-stemmed dudleya, San Fernando Valley spineflower, as well as Southern Cottonwood-Willow Riparian Forest community.

Impacts to Stephens' kangaroo rat, unarmored three-spined stickleback, and California Condor would be the same as described for Alternative 1.

Impacts to Wright's checkerspot butterfly, orange-throated whiptail, California Gnatcatcher and southwestern pond turtle would be the same as for Alternative 3. Impacts to Least Bell's Vireo habitat would be positive but not significant

Land tenure adjustments and vegetation management would have moderately positive impacts on deer and quail habitat and populations.

Impacts on coastal sage scrub and riparian habitats would be positive relative to consolidation/acquisition on BLM-administered lands, but not significant from a regional perspective.

Land acquisitions and management under ACEC designations would have positive impacts on populations of Mexican flannel bush, Santa Ana River woolly-star, slender-horned spineflower and Southern Willow Scrub.

Development following land disposal would negatively impact potential habitat for many-stemmed dudleya, Munz's onion, San Fernando Valley spineflower, as well as Southern Cottonwood-Willow Riparian Forest community.

Prescribed burning for livestock grazing would have a negative impact on populations of Tecate cypress and the Southern Interior Cypress Forest community.

Impacts to unarmored three-spined stickleback and California Condor would be the same as described for Alternative 1. The overall impacts to all other species and habitats would be the same as for Alternative 3.

Land acquisitions and management under ACEC designations would have the same impacts as described for Alternative 3. Development following land disposal and exchanges would have the same impact as Alternative 3, but would also impact some potential habitat for Nevin's barberry; however, the overall impact on this species would be positive due to management of existing populations at Oak Mountain.

**Table S-1. Cumulative Summary of Alternative Impacts, (cont.)**

Environmental Topic	Alternative 1 No Action (Continuation of Present Management)	Alternative 2 Administrative Adjustments
<b>Impacts to Open Space Values</b>	Open space values on 93,002 acres would be maintained, including 82,771 acres rated high or moderate in open space values. Land acquisitions and consolidation would provide for open space conservation. Negative impacts, however, would result from development of 35,460 acres following land disposal, including 20,921 acres rated high or moderate in open space value.	Open space values would be maintained on 81,527 acres including 59,939 acres of public land rated as high or moderate in open space value. Land ownership adjustments, however, would negatively affect open space values through disposal and subsequent development of 46,935 acres, including 30,381 acres rated high or moderate in open space value.
<b>Impacts to Recreation Use</b>	Alternative 1 would do little to utilize existing recreation resource potential. Expected increases in public recreation use from 37,000 to 54,000 VUD would be mostly attributed to urban expansion and population growth. Concentration of use and additional user conflicts would be expected. Loss of 78 miles (30%) of motorized vehicle routes due to land disposal would be a minor, given the current lack of access to most lands, low use levels and the large number of available vehicle routes on alternate lands.	Alternative 2 would do little to utilize existing recreation resource potential. Expected increases in public recreation use from 37,000 to 42,000 VUD would be attributed strictly to urban expansion and population growth, and additional user conflicts would be expected. Disposal of lands with 136 miles (52%) of motorized vehicle routes and continued lack of access would be a significant loss given the existing regional demands for recreation lands and the potential use levels on several of the larger parcels.
<b>Impacts to Mineral Development</b>	Impacts resulting from disposal of surface lands and subsequent uses which generally preclude mineral development would be low to moderate on a planning area-wide basis. However, localized impacts would be different due to the fact that the planning area includes several different markets. Stipulations applied to new oil and gas leases would increase development costs and complicate exploratory efforts.	Impacts resulting from disposal of surface lands and subsequent uses which generally preclude mineral development would be low on gold, gemstone, dimension stone, and miscellaneous metallic and non-metallic mineral commodities, and high on sand and gravel resources. Stipulations applied to new oil and gas leases would increase development costs and complicate exploratory efforts.



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**Alternative 3  
Sensitive Species,  
Open Space and Recreation**

**Alternative 4  
Use Opportunities**

**Preferred  
Alternative**

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Open space values on 112,907 acres would be maintained, including 98,229 acres of public land rated as high or moderate in open space value. Land acquisitions and consolidation would provide for open space conservation. In some areas, however, development following land disposal would negatively affect open space values of 15,555 acres, including 6,689 acres rated high or moderate in open space value.

Substantial benefits to the recreating public through the increased development of recreational opportunities and services would be provided. Three special recreation management areas would be established. Loss of land base from disposal actions would be small, and involve lands generally offering little recreational potential. Expected increases in use from 37,000 to 161,000 VUD would be attributable to urban expansion, local population growth, acquisition of access, development of facilities, and the provision of visitor services. The cumulative impact of this alternative on meeting recreational use demands in the South Coast Planning Area would be significant and positive.

Withdrawal of the 2,800 acres in the Steele Peak and the Santa Margarita ACECs would negatively impact exploration for gold and sand and gravel resources, respectively. Closure of an additional 9,419 acres within ACECs to mineral material sales would result in moderate impacts to potential mineral development on a planning area basis. However, localized impacts would vary, depending on local markets. Stipulations applied to new oil and gas leases would increase development costs and complicate exploratory efforts.

Open space values would be maintained on 107,213 acres including 94,347 acres of public land rated as high or moderate in open space value. Conservation of open space would also be provided by land acquisitions and consolidation. In some local areas, however, development following land disposal would negatively affect open space values of 21,249 acres, including 9,623 acres rated high or moderate in open space value.

Substantial benefits to the recreating public through the increased development of recreational opportunities and services would be provided. Three special recreation management areas would be established. Loss of land base from disposal actions would be small, and involve lands generally offering little recreational potential. Expected increases in use from 37,000 to 233,000 VUD would be attributable to urban expansion, local population growth, acquisition of access, development of facilities, and the provision of visitor services. The cumulative impact of this alternative on meeting recreational use demands in the South Coast Planning Area would be significant and positive.

Impacts on potential mineral development resulting from closure of 4,620 acres in five ACECs to mineral material sales and disposal of surface lands with mineral potential would be negative but low to moderate on a planning area wide basis. However, localized impacts would vary, depending on local markets. The potential for developing a major sand and gravel deposit in the Agua Dulce area of Los Angeles County would be facilitated by the acquisition of surface ownership. Stipulations applied to new oil and gas leases would increase development costs and complicate exploratory efforts.

Impacts would be the same as described for Alternative 3.

Substantial benefits to the recreating public through the increased development of recreational opportunities and services would be provided. Three special recreation management areas would be established. The loss of land base from disposal actions would be small, and involve lands generally offering little recreational potential. Expected increases in public use from 37,000 to 157,000 VUD would be attributable to urban expansion, local population growth, acquisition of access, development of facilities, and the provision of visitor services. The positive cumulative impact on meeting recreational use demands in the South Coast Planning Area would be significant.

Impacts would be the same as described for Alternative 3.

**Table S-1. Cumulative Summary of Alternative Impacts, (cont.)**

Environmental Topic	Alternative 1 No Action (Continuation of Present Management)	Alternative 2 Administrative Adjustments
<b>Impacts to Paleontologic Resources</b>	In the Badlands of Riverside County, development following land disposal would negatively affect a significant paleontological resource. Low to moderate negative impacts to fossil-bearing deposits would be expected in Los Angeles County as a consequence of land development, mining, or recreational activities.	Impacts would be the same as described for Alternative 1.
<b>Impacts to Kuchamaa (Native American Values)</b>	Disposal and subsequent development of the Little Tecate Peak parcel would have a significant negative impact on Native American religious values.	Disposal and subsequent development of Kuchamaa (Tecate Peak) and Little Tecate Peak would have a significant negative impact on Native American religious values.
<b>Impacts to Watershed (Beauty Mountain Management Area)</b>	Mining would negatively impact 150 acres of prime watershed area, accelerate soil erosion, degrade riparian values and increase stream siltation.	Impacts would be the same as described for Alternative 1.

Alternative 3 Sensitive Species, Open Space and Recreation	Alternative 4 Use Opportunities	Preferred Alternative
<p>In Riverside County, the acquisition of an additional 1,000 acres in the Badlands will supplement public ownership of a significant paleontological resource. Negative impacts from OHV use would occur due to increasing use. Restriction and enforcement of OHV use to existing routes of travel, however, would minimize these impacts. Low to moderate negative impacts to fossil-bearing deposits are expected in Los Angeles County as a consequence of land development, mining, or recreational activities.</p>	<p>The impacts of this alternative are the same as described for Alternative 3.</p>	<p>The impacts of this alternative are the same as described for Alternative 3.</p>
<p>The management prescriptions for the Kuchamaa ACEC, including the avoidance of future rights-of-way, possible relocation or removal of existing right-of-way facilities, and land acquisition, would protect the Native American religious values and the natural state of Little Tecate Peak and Kuchamaa (Tecate Peak).</p>	<p>Kuchamaa would be protected by management under the prescriptions of ACEC designation. Little Tecate Peak, however, would not be given the same protection.</p>	<p>Impacts would be the same as described for Alternative 3.</p>
<p>Management under ACEC designation would provide opportunities to manage 5,800 acres of prime watershed. Mining would have the same impacts as Alternative 1, but rehabilitation would be emphasized to minimize long-term impacts.</p>	<p>Impacts would be the same as described for Alternative 1.</p>	<p>Impacts would be the same as described for Alternative 3.</p>



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# Chapter 1 - Introduction

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## Description of the Planning Area

The South Coast Planning Area encompasses portions of five highly urbanized southern California counties inhabited by a burgeoning population. This population is estimated at over 16 million and is extraordinarily diverse. Over 75 languages are spoken in Los Angeles schools alone. In addition, over three million people live in Baja California, Mexico within a few miles of the border.

The planning area is the portion of the BLM's Palm Springs-South Coast Resource Area which is outside of the California Desert Conservation Area (CDCA). Within this 6.1 million acre area, this plan will guide future management of approximately 296,000 acres of BLM-administered public land. This includes 129,000 acres of BLM-administered surface land (also referred to as BLM land or public land) and 167,000 acres of federal mineral ownership where the surface is privately owned (often referred to as federal mineral split-estate lands). The 129,000 acres of public land are scattered over a five-county area in 296 separate parcels. Ninety-five percent of the BLM land base in the planning area is in western San Diego and western Riverside counties, with the remainder in southwestern San Bernardino, Los Angeles, and Orange counties.

There are also other federally owned lands within the planning area including approximately 1.6 million acres within four National Forests. There are also approximately 185,000 acres within federal military reservations such as Camp Pendleton Marine Corps Base, Norton Air Force Base, Miramar Naval Air Station and March Air Force Base, as well as approximately 37,000 acres on the San Clemente Island Naval Reservation. In addition there are over 8,000 acres under the management of other federal agencies, such as the U.S. Army Corps of Engineers the National Park Service, and approximately 160,000 acres within Indian Reservations. In addition to the management of the public and split-estate lands mentioned above, the BLM has responsibility for administration of mineral leasing on other federal lands in accordance with the land use plans of other federal agencies.

Collectively the five counties within the planning area are experiencing a growth rate of nearly ten percent, which could mean a doubling of the population in some areas by the end of the decade. Within the planning area during this last year six new cities were incorporated. Urban expansion is increasingly taking over the remaining open spaces. BLM-administered land, in conjunction with land in the four National Forests, form the basis for much of the remaining open space in the region.

The existing environment and the challenges for future management of the BLM public lands within this area are shaped by a multitude of needs related to the dynamic social and economic climate. Heavy demands are placed on resources, such as sand and gravel for construction, land for community expansion and landfills, and corridors for utility, transportation, and communication systems. Also needed, however, are viable natural habitat areas for sensitive species, open space, parks and general recreation. Extensive loss of habitat has resulted from past development, with the result that several species have been listed as endangered. Attention is focused on the few most critically affected species. The listing of an individual species, however, is really the recognition of a symptom resulting from an overall loss of biodiversity caused by both direct destruction of habitat and fragmentation into areas too small to be viable for some species. Riverside County is working toward development of a multi-species habitat conservation plan to help maintain biodiversity. Both Riverside and San Bernardino counties are studying the formation of open space districts where

public lands would serve as the core. As urban expansion continues in southern California, there will be increasing demand for undeveloped land and the values associated with it.

To facilitate the planning process, the planning area has been divided into four separate management areas shown in Map 1-1. Although these areas are relatively large and BLM parcels are widely scattered, they have a degree of homogeneity with regard to resource characteristics and planning issues. The division is generally along county lines which serves as a general geographic reference for identifying where the lands are located, and also allows them to be evaluated in the context of local government concerns.

## **Management Areas**

### **San Diego County**

The San Diego County management area includes 65,000 acres of BLM-administered land in the western portion of the County. Most of the public land, including the largest parcels, are in the mountainous terrain lying between Interstate Highway 8 and the U.S.-Mexico border. Lands within the management area contain several sensitive plant and animal species and habitats, and also have potential to provide opportunities for recreational use. The management area does not include the area covered by the BLM's Eastern San Diego County Management Framework Plan (MFP), or the area to the north of State Highway 79, which is within the Beauty Mountain management area. In addition to the acreage mentioned above, there are also 74,000 acres of federal mineral split-estate lands.

### **Riverside-San Bernardino County**

The Riverside-San Bernardino County management area includes the western portions of these counties. There are approximately 30,000 acres of public land and an additional 35,000 acres of federal mineral split-estate lands. Most of the land is comprised of scattered parcels in Riverside County. A number of these parcels contain habitat of several sensitive species, most notably the Stephens' kangaroo rat. The largest parcel of public land is near Poppet Flat, and has the potential to provide recreational use opportunities. The 1,000 acres in San Bernardino County are in the Santa Ana River wash and contain populations of two federally endangered plant species, the slender-horned spineflower and the Santa Ana River woolly-star. The Santa Ana River wash area also contains valuable sand and gravel resources, and some of the lands have potential for other mineral resources, including a few areas with low or moderate potential for oil and gas.

### **Beauty Mountain**

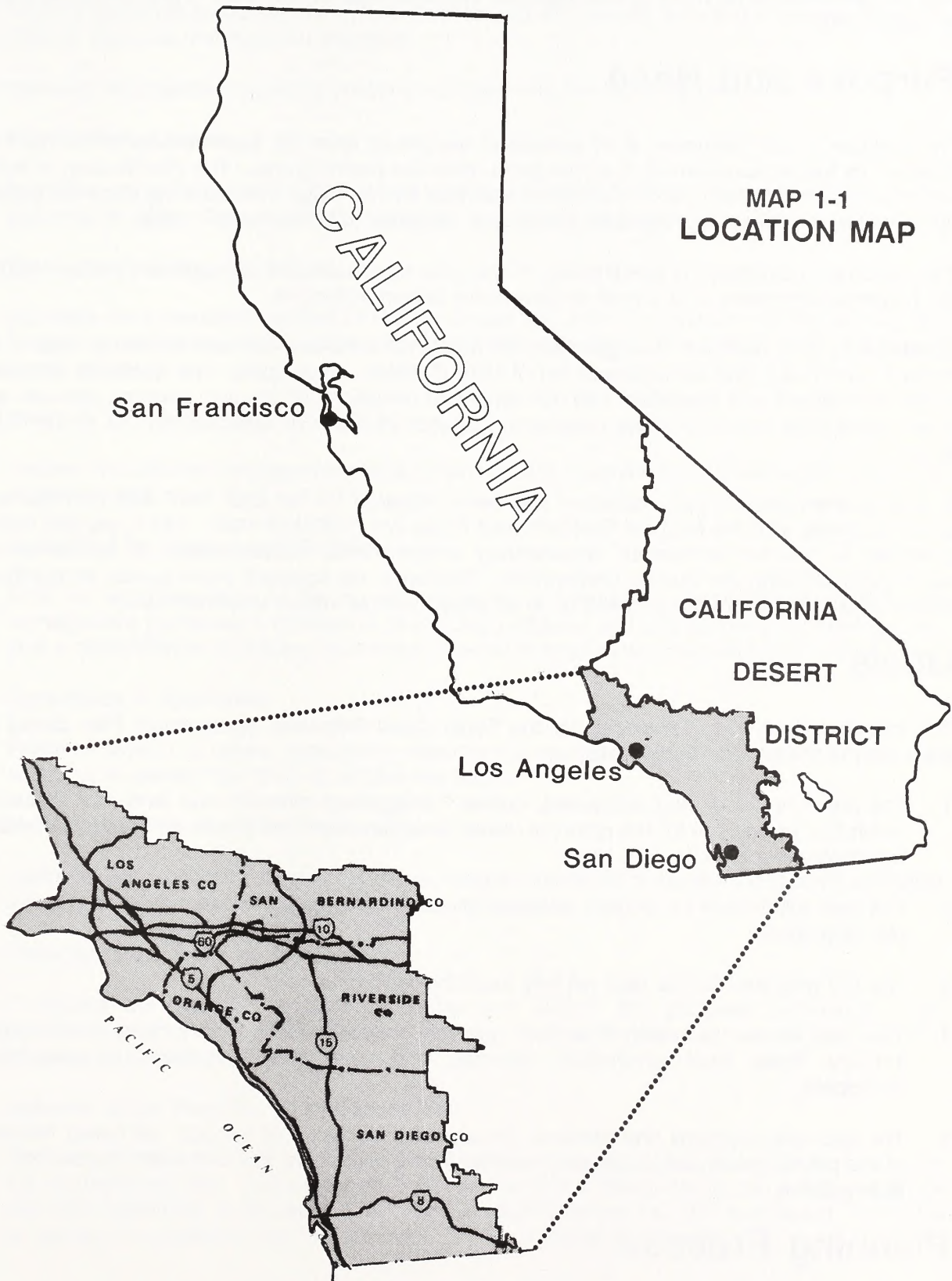
The Beauty Mountain management area includes 28,500 acres of public land, with lands in both Riverside and San Diego Counties. In addition, there are approximately 21,500 acres of federal mineral split-estate lands. The management area is north of State Highway 79, south of the Cahuilla Indian Reservation and west of Anza-Borrego Desert State Park. Most of the public lands are in a few large parcels and form a nearly consolidated block of public land ownership. The lands have value for watershed and wildlife habitat, and also have potential to provide for recreational use. The most notable mineral potential in the area is for tungsten.

### **Los Angeles-Orange County**

The Los Angeles-Orange County management area includes all but the northeastern desert portion of Los Angeles County. The area includes approximately 5,500 acres of public land and an additional 36,000 acres of federal mineral split-estate land. Much of the public land has high to moderate

# SOUTH COAST PLANNING AREA

MAP 1-1  
LOCATION MAP



potential for oil and gas, and some of the federal mineral split-estate lands in the Soledad Canyon area contain valuable sand and gravel deposits. Within Orange County there is only one small parcel of public land.

## Purpose and Need

The purpose of this document is to present to the public what the BLM believes to be the best direction for future management of public lands within the planning area. The identification of public issues and management concerns results in the need for planning. This planning effort will present opportunities to change management direction in response to those issues raised.

This document combines the presentation of draft alternative resource management plans, including the preferred alternative, and a draft environmental impact statement.

Development of a resource management plan (RMP) will fulfill the mandate of Section 202 of the Federal Land Policy and Management Act of 1976 (FLPMA), which states "The Secretary shall, with public involvement and consistent with the terms and conditions of this Act, develop, maintain, and when appropriate, revise land use plans which provide by tracts or areas for the use of the Public lands."

A draft environmental impact statement has been prepared for the draft RMP and alternatives in order to comply with the National Environmental Policy Act (NEPA) of 1969. NEPA requires federal agencies to prepare statements documenting environmental consequences of federal actions significantly affecting the human environment. Resource management plans qualify as significant actions and thus require the preparation of an environmental impact statement (EIS).

## Goals

The following goals were developed for the South Coast Resource Management Plan during the initial stages of the planning process.

1. The plan will clearly and adequately outline management direction and land use allocations which are appropriate for the resource values associated with the public lands within the South Coast planning area.
2. The plan will provide for efficient and cost effective management of the public lands within the planning area.
3. The EIS prepared for the plan will fully meet the requirements of NEPA.
4. The plan will be the result of a process which provides ample opportunities for the public, industry, State, local government agencies, and other federal agencies to meaningfully participate.
5. The land use decisions and resource management guidance of the plan will reflect the views of the public (locally, regionally and nationally) and will adhere to federal laws, regulations and BLM policies.

## Planning Process

The BLM planning system is divided into three tiers. The first tier is one of national policy and State



Director guidance that identifies goals, objectives, priorities and other factors for use in planning. This document is part of the second tier - resource management planning. Activity planning is the third tier. Activity plans are prepared when more detailed and site specific planning is needed than that provided by resource management planning.

The resource management planning process is divided into the following nine steps:

1. Identification of Issues

Identifies resource management conflicts and opportunities that can be resolved through the planning process. Public scoping is used to help identify planning issues.

2. Development of Planning Criteria

Identifies the information needed to resolve issues and provides guidance for formulating and evaluating alternatives, and selecting the preferred alternative. The criteria are circulated for public review.

3. Inventory Data and Information Collection

Involves the collection of resource, social, economic, and institutional data needed for completion of the process.

4. Analysis of the Management Situation

Calls for an assessment of the current situation. It includes a description of current BLM management guidance, a discussion of existing problems and opportunities for solving them, and a consolidation of existing data that is needed to analyze and resolve the identified issues.

5. Formulation of Alternatives

Prepares several complete, reasonable resource management alternatives including one for no action, and several that strive to resolve the issues.

6. Estimation of Effects of Alternatives

Estimates the physical, biological, economic, and social effects of implementing each alternative in order to allow for a comparative evaluation of impacts.

7. Selection of the Preferred Alternative

Compares the impacts of each alternative and selects the preferred alternative. The interdisciplinary process used in Steps 5 through 7 is documented in a draft RMP/EIS, and circulated for public review.

8. Selection of the Resource Management Plan

Analyzes public comments, modifies the alternatives as appropriate, and serves as a basis for the management plan. The proposed RMP and final EIS is distributed to the public in the final RMP/EIS document. A 30-day protest period is allowed before the RMP is adopted. A Record of Decision is published after consideration of all comments or protests.

### 9. Monitoring and Evaluation

This step involves monitoring and evaluating the resource conditions as the plan is implemented. If monitoring shows that resource issues are not being satisfactorily resolved or that the desired results outlined by the RMP are not being met, the plan may be amended or revised.

## Issues Selected for Analysis

Five planning issues are identified for examination in the South Coast RMP. These issues were identified during the initial public scoping phase of the planning effort. A description of public involvement in the planning process, including public scoping, consultation and coordination, is presented in Chapter 5.

### Land Tenure Adjustment and Use Authorizations

Adjustment of the land ownership pattern in response to land use needs, management efficiency and sensitive resources management objectives is a major issue.

There are 296 parcels of public land within the planning area. They range in size from less than one acre to over 18,000 acres. The parcels are scattered, and most do not have legal and/or physical access, making management challenging. Trespasses, including occupancy, access roads, utility lines and dump sites exist on some parcels.

There continues to be a demand for land to provide for community expansion and rural residential development. This includes not only land for industrial, commercial and residential development, but also for the infrastructure needed to support such developments. Land can be made available for such use in a variety of ways including rights-of-way, special use permits, leases and disposal through sale or exchange. The land use decisions of the RMP will identify which lands are to be available for these purposes. These decisions will potentially affect the preservation of open space areas, the protection of sensitive habitat areas and management for other land uses including recreation and mineral development.

### Threatened, Endangered and Other Sensitive Species

The planning area contains habitat for several federally listed endangered and threatened species, including seven vertebrate species as well as six plant species. In addition, there are 33 vertebrate species and over 100 plant species which are candidates for federal listing as threatened or endangered, and therefore considered sensitive. Within the past five years, four new species have been federally listed as endangered. These are the Least Bell's Vireo, Stephen's kangaroo rat, Santa Ana River woolly-star, and slender-horned spineflower. As a result of the continued loss of habitat due to development of private lands, it is likely that additional species will be proposed for listing within the next few years. The most threatened wildlife habitat types are coastal sage scrub communities and riparian communities. These and several other plant communities are rapidly disappearing and considered rare in southern California by Holland (1986).

Due to the recent listing of species as endangered and the likelihood of additional listings, the protection of sensitive species' habitat has become a matter of great concern to the public and local governments. In Riverside County, for example, new development has been curtailed in many areas in order to comply with the Endangered Species Act provisions against "taking" of a listed species; in this case the Stephens' kangaroo rat. With the large number of both listed and candidate species in the planning area, it has become apparent that sufficient habitat areas must be maintained as open

space to protect sensitive species' habitat. If this is not done, habitat conservation will become more difficult as additional species are listed and viable habitat dwindles.

The BLM-administered public lands contain potential habitat for many of the sensitive species within the planning area. In some cases the parcels represent a substantial portion of the existing habitat. A large portion of the remaining populations of Santa Ana woolly-star and slender-horned spineflower, for example, are concentrated on public lands, and there are several parcels with a total of over 5,000 acres within the range of the Stephens' kangaroo rat. In other cases only small, isolated pockets of suitable habitat occurs on BLM-administered lands.

The decisions of the RMP will affect the future of these sensitive species' habitats. Most important will be decisions identifying areas where habitat protection will be a priority. How other uses, such as recreation and mineral development, are managed could also affect sensitive habitats. In addition, the land ownership adjustment decisions of the RMP could either be of significant benefit or conflict with habitat conservation efforts, depending on which lands are identified for disposal, exchange, consolidation, or acquisition.

### **Open Space**

Open Space is a paramount concern in the South Coast area, due to the rapid urbanization of this coastal region. Open space may satisfy several needs. It can provide simply for scenic viewsheds or vistas, offering physical and psychological release from more densely developed areas. It also serves to preserve and protect intrinsic natural resource values. And, obviously the availability of open space is inextricably linked with opportunities for passive or active recreation. The highest economic return to private landowners, however, is often high density development, leaving the existing BLM-administered public lands as one of the few opportunities to preserve open space. This fact, coupled with the continuing loss of critical habitat for several plant and animal species protected by the federal Endangered Species Act, focuses the open space issue on the BLM-administered public lands. The RMP decisions, particularly those relating to land ownership adjustments, will potentially affect open space values. Open space, therefore, is an issue to be addressed in the RMP.

### **Recreation and Public Access**

This was the predominant issue identified by the public and local governments during the scoping process. The concern is that while the human population of the planning area grows, the amount of land available for recreational use diminishes. The demand for recreational opportunities is diverse, ranging from acquisition of public access for unstructured and dispersed activities to developed campgrounds and trail systems. In many cases the general public is prevented from using public lands because surrounding land owners have restricted physical access and the BLM has not acquired legal access. In some areas where physical access does exist, there is a demand from adjacent landowners to control presently occurring activities such as shooting, campfires and vehicle use. The decisions of the RMP could provide for greatly increased recreational use opportunities through providing improved access and facilities. Managing increased recreational use while limiting conflicts with other land users and sensitive resources, however, would present a challenge requiring an increased BLM management presence in the planning area.

### **Oil and Gas Leasing and Sand and Gravel Development (Los Angeles-Orange and Riverside-San Bernardino County Management Area)**

Oil and gas leasing and sand and gravel development are issues in the Los Angeles-Orange County and Riverside-San Bernardino County management areas. They were raised as issues because of the national economic importance of oil and gas resources, the regional importance of sand and

gravel resources, and the potential for conflicts between mineral development and other land uses and resources.

The planning area contains valuable deposits of oil and gas, particularly within the Los Angeles-Orange County management area. There are a total of 171 producing oil and gas wells on federal leases within the planning area, and a large portion of the area is considered to have high potential for additional development of oil and gas.

Due to the rapid rate of community expansion within the planning area, there is also an increasing demand for sand and gravel to be used as construction aggregate material. The BLM-administered lands within the planning area are known to contain several areas with valuable sand and gravel deposits, including areas in Los Angeles and San Bernardino Counties which have been designated regionally significant by the California Division of Mines and Geology through state classification authorized under the State Mining Act of 1975. As the supplies of present operations are depleted and other potential supply areas are covered by development, the BLM-administered lands will be increasingly in demand.

## Planning Criteria

Planning criteria are the standards or rules and other factors used to form judgments about data collection, analysis and decision making during planning. Planning criteria for the South Coast RMP include all applicable federal laws, regulations, executive orders and policies which BLM is required to follow. Some of the planning criteria, however, were specifically developed for the South Coast planning effort and were reviewed by the public earlier in the planning process. These planning criteria are listed below.

## Land Tenure Adjustment and Use Authorizations

1. Identify the need for acquisition of lands or access to improve the effectiveness of managing high resource values on the public lands and opportunities for public use.
2. Identify those lands which are too isolated or too small to be effectively managed and should be made available for disposal to improve the efficiency of land management.
3. Provide for both the recreation/open space and the development needs in response to the demands of the public and expanding communities.
4. In land disposal actions, give priority to land exchanges for acquisitions to consolidate public ownership and enhance resource values.
5. Coordinate with National Forest supervisors regarding the suitability for transfer of a few small parcels which are isolated from other BLM-administered lands but are adjacent to the National Forests.
6. Consider opportunities to exchange lands with sensitive species or other resource values, where the exchange would improve opportunities through consolidation in other areas, for long-range protection and management of the species or resource values involved.
7. Review withdrawals and Classification and Multiple Use Act (C&MU) orders. Existing C&MU orders will be reviewed and the RMP alternatives will address withdrawn lands where revocation is pending or proposed or where there is a high potential that revocation would be considered. Included will be the Navy withdrawal in the La Posta area, the Bureau of Reclamation proposed

withdrawal in the Santa Margarita River area, the Pacific Southwest Forest Service Experiment Station withdrawal in the Poppet Flat area and the reservoir site withdrawal in the San Jacinto River area. The plan alternatives will also address lands in the upper Santa Ana River wash area, congressionally withdrawn for water conservation purposes, and may include management direction to review the need for the withdrawal. The plan alternatives for surface management will not address the San Clemente Island or Miramar Naval Air Station withdrawals. If these withdrawals are terminated during the life of the RMP, a plan amendment will be required.

8. The RMP alternatives will address current Recreation and Public Purpose Act (R&PP) leased or patented lands where reversion action is pending or where the current holders are in non-compliance.
9. Identify the routes of existing utility corridors over BLM-administered lands to help determine if utility corridor designation is needed.
10. Identify locations of sensitive resources and use conflicts to help determine if any rights-of-way avoidance or exclusion areas are needed.

### **Threatened, Endangered and Other Sensitive Species**

1. Conduct inventories for the planning effort which rely primarily on the evaluation of habitat characteristics to determine the likelihood for occurrence of sensitive species.
2. Consolidate public land ownership in areas where there is an opportunity to provide for the improved protection and management of sensitive species.
3. Identify areas where protection and management of sensitive species should be emphasized and define areas where activity level planning is needed

### **Open Space**

1. Identify areas with open space value based on visual resource characteristics and input from the public, including local governments.

### **Recreation and Public Access**

1. Provide, in response to public demand, a variety of recreational settings and opportunities which are compatible with resource values and other uses.
2. Identify areas requiring special recreation management attention, including areas where facilities such as campgrounds or trails are feasible (Special Recreation Management Areas). Especially consider the Poppet Flat, Beauty Mountain and Otay Mountain areas, including an Otay to Tecate border-lands trail.
3. Acquire access to areas having the capability for providing substantial recreation use.
5. Reduce existing user conflicts, such as in the Canyon Lake area.
6. Coordinate with the National Park Service regarding the Wild and Scenic River eligibility of the Santa Margarita River.

## Oil and Gas Leasing and Sand and Gravel Development

1. Utilize the existing classification of sand and gravel resources, prepared by the California Division of Mines and Geology, in making mineral materials related evaluations.
2. Identify areas with high quality sand and gravel deposits as priority areas for development, if conflicts with other land uses and resources can be avoided.
3. Evaluate the value of oil and gas leasing and/or mineral material sales in comparison to both the use of the land for other purposes and the value of resources which might be affected when considering development constraints or closures.
4. Determine if community pits or common use areas should be established in areas with high demand for mineral materials.
5. Identify areas of federal mineral split-estate where expected residential or commercial development will adversely affect the potential for development of mineral resources, and determine if acquisition of the surface rights is necessary to enable mineral resource development.
6. Evaluate mineral development to ensure consistency with local planning.
7. Potential development of locatable and solid leasable minerals is not as great as for either oil and gas or sand and gravel. However, they will both be handled as part of the minerals issue to provide a clear presentation of all decisions pertaining to minerals management.
8. Within the planning area there are a number of areas where mineral rights have been acquired by the United States, but are currently undocumented by BLM recordation. The RMP decisions pertaining to oil and gas leasing of these lands will be made by evaluating environmental impacts, based on estimates of the amount of such lands, and the reasonably foreseeable development expected to occur. Additional NEPA review would be required at the leasing stage.

## Relation to Other Plans and Programs

In 1975 the Escondido-Border Planning Unit Management Framework Plan (MFP) was completed, covering the public lands in San Diego County. In 1980 the Southern California Metropolitan Project was formed for the purpose of assessing the public lands within the area to determine whether they should be retained, transferred to the U.S. Forest Service or be subject to disposal through sale, exchange or the R&PP Act. A Management Action Summary (MAS) was completed, categorizing individual parcels for either disposal, retention or transfer to the U.S. Forest Service. The South Coast RMP will replace the management guidance provided by these two documents.

Determinations with respect to wilderness suitability required under Section 202 and 603 of FLPMA have already been made within the South Coast Planning Area. The Western Counties Wilderness EIS of 1987 and the corresponding Wilderness Study Reports document this process. The Agua Tibia Wilderness Study Area has been recommended as suitable for wilderness designation, and the Western Otay Mountain and the Southern Otay Mountain Wilderness Study Areas have been recommended partially suitable. The areas recommended suitable for wilderness are recognized in this planning effort for future management as wilderness. All other areas will be recognized as being available for management without regard for wilderness values, if and when Congress releases them from further consideration. In the meantime, the Interim Management Policy for Wilderness Study Areas will be adhered to in the management of these areas. If the decision of Congress differs from

the recommendations, a plan amendment to the RMP may be required.

Decisions related to livestock grazing within the planning area were made in the 1984 Record of Decision for the Otay Grazing EIS. Although planning decisions in the RMP will remain consistent with the Otay Grazing EIS to the extent possible, adjustments may be made based on new information with respect to the range resource or conflicts with other planning decisions. In relation to the RMP goals of improving management efficiency and effectiveness, decisions will be made on the feasibility and desirability of maintaining grazing activities in areas where they are now occurring.

By a decision of February 5, 1990 the California Rocks and Islands were designated as an Area of Critical Environmental Concern. This decision, which is incorporated by reference, applies to all islands, rocks and pinnacles off the California coast which were withdrawn by Public Land Order (PLO) 6369. The withdrawal is for establishment of the California Islands Wildlife Sanctuary and will continue, as will management of the wildlife sanctuary by the California Department of Fish and Game through Memorandum of Understanding. Islands, rocks and pinnacles not affected by PLO 6369 include those off the Orange County Coast (these being temporarily withdrawn by the Act of Congress approved February 18, 1931) as well as Santa Catalina Island and San Clemente Island.

## Document Format

The general format of this document is similar to most major EISs. Background and introductory material are in Chapter 1. Alternative management scenarios, including the preferred alternative are described in Chapter 2. Chapter 3 describes the affected environment, focusing on the key issues and topics analyzed in Chapter 4. Chapter 5 describes the public involvement process. The document concludes with the List of Preparers, Glossary and several appendices that provide information on such subjects as sensitive species inventory and analysis, areas of critical environmental concern and the availability of individual parcels for various types of disposal, such as exchange or sale.

Several things are noteworthy about the format of this document. Knowledge of them will be helpful to the reader and facilitate review:

1. Alternatives are presented in Chapter 2 separately for each of the four management areas.
2. The affected environment descriptions in Chapter 3 begin with a planning area overview, but most of the information is presented in separate sections for each management area.
3. The impact analysis in Chapter 4 is area wide, not management area specific. It does, however, focus on important impacts that are specific to each management area as appropriate. In addition, summary tables of environmental consequences for each management area are presented at the end of Chapter 2.
4. Due to the scattered land ownership pattern of BLM-administered lands within the planning area, it may often be difficult for the reader to determine the exact locations of the areas which are discussed. To help identify the locations, the parcels are often referred to by the name of a nearby geographic feature. Also, they are often referred to by parcel number. The parcel numbers, legal descriptions and acreage of all parcels are listed in Appendix A, and the township and range from the legal description of a given parcel can be used as coordinates for finding its map location. The parcels listed in Appendix A do not include any of the split estate lands with federal mineral ownership.





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# Chapter 2 - Alternatives

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## Alternative Formulation

Alternative resource management plans are described in this chapter. Each alternative represents a plan to guide future management of public lands and resources. The alternatives were developed for each management area by an interdisciplinary team, based on the goals, issues and criteria discussed in Chapter 1. One alternative for each management area is identified as the preferred alternative; the combination of the four management area preferred alternatives represents the draft resource management plan. The rationale for selecting each management area's preferred alternative is explained after presentation of all the alternatives. The rationale takes into account the specific features of each management area, and the regional, statewide and national perspective on public land resources. Thus, in one area consumptive uses may be emphasized while in another management may be more restrictive to protect sensitive resources. This helps to ensure that the resources will be managed to maximize all public benefits.

## Alternative Definitions

The alternatives developed for each management area, are generally defined as follows:

The **No Action Alternative** was developed for all four management areas and is defined as the continuation of present management. It is not a static condition, but a logical progression of the current level, intensity, direction and systems of management.

Three of the management areas have an **Administrative Adjustments Alternative**. For the Los Angeles-Orange County management area the No Action Alternative is equivalent to the Administrative Adjustments Alternative. Administrative Adjustments focuses on land disposal and transfer to other agencies, through providing for improvement of management efficiency and consolidation of BLM public lands in other areas.

The **Sensitive Species, Open Space and Recreation Alternative** was developed for all four management areas. It emphasizes the protection of sensitive species habitats, the maintenance of open space values, provides for nonconsumptive recreation use and adjustments in land ownership to improve management effectiveness. Land uses which are more consumptive in nature are not necessarily prohibited, but are screened for compatibility with overall management objectives.

The **Use Opportunities Alternative** was developed for all four management areas. In three of the management areas it emphasizes providing opportunities for recreation use. In the Los Angeles-Orange County management area, however, mineral development is emphasized. This alternative also provides for the management and protection of sensitive resources, but with less emphasis than the preceding alternative.

### Alternative Components

The alternatives developed for each management area consist of three elements:

1. **Resource Condition Objectives.** These are major "themes" or plan objectives which guide management. They are necessary to develop land use allocations and to provide guidance for addressing unforeseen proposals.
2. **Land Use Allocations.** These are the decisions of where land uses will be allowed, restricted or excluded.
3. **Management Actions.** These are not land use decisions, but the implementation actions which:
  - Ensure planning objectives are met.
  - Ensure necessary refinements to the plan are being made.
  - Guide BLM budgeting and programming.

Management actions alert the public to specific follow-up actions necessary to implement the plan, so everyone is aware of the costs, complexity, time constraints, and other requirements to realizing the plan objectives. There is no intent to provide a comprehensive list of management actions at this time; actions, and schedules will be added, deleted, or modified during the useful life of this plan.

### Guidance and Decisions Common to All Alternatives

Regardless of the Resource Management Plan (RMP) which is eventually selected, public lands within the planning area will be managed in accordance with all applicable laws, regulations and policies. In addition, some of the decisions developed in the planning process apply to all of the alternatives considered. The following sections list the policy and management guidance and the planning area-wide decisions which are common to all alternatives.

#### Policy and Management Guidance

1. Exchange will be the preferred method of disposal in the following order of priority:
  - Exchange for acquisitions within the management area.
  - Exchange for acquisitions within the planning area.
  - Exchange for acquisitions outside of the planning area.
2. Lands within wilderness study areas (WSAs) and areas of critical environmental concern (ACECs) are not available for disposal.
3. Public lands not identified in this document but later identified because of survey error, resurvey, or review of land status records, will follow the plan resource condition objectives and land use allocations. Those parcels which are isolated from other public lands may be available for disposal.

## Chapter 2 - Alternatives

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4. Disposal of parcels with existing land use authorizations will be subject to valid existing rights.
5. Where lands identified for disposal are encumbered with mining claims, disposal may take place if the claims become void, are relinquished to the United States, or in accordance with any future policy allowing disposal of mining claim encumbered lands.
6. Specific parcels identified for disposal will be evaluated for the presence of significant resource values prior to disposal. Resources to be evaluated will include minerals, cultural resources, and threatened, endangered and other sensitive species. Surveys for threatened, endangered and sensitive plant species will be guided by the analysis for occurrence potential as presented in Appendix B.
7. Disposal of habitat of officially listed endangered or threatened species would occur only after consultation with the U. S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act of 1973, as amended, and conference with the California Department of Fish and Game (CDFG) pursuant to the BLM-CDFG master Memorandum of Understanding.
8. The general land areas identified for acquisition are high priority areas which give the BLM direction for land and resource consolidation in order to improve manageability and cost-effectiveness. These identified acquisitions are not intended to be an exhaustive list of every opportunity. Acquisition depends on willingness for sale or exchange. Opportunities which arise and that meet resource condition objectives will be considered.
9. The U.S. Forest Service will be consulted prior to disposal of any parcel which is contiguous to a National Forest.
10. All parcels contiguous to National Forests and identified suitable for disposal are also considered suitable for jurisdictional exchange between the U.S. Forest Service and BLM.
11. All land use proposals will be evaluated for conformance with plan objectives and land use allocations.
12. Termination of unauthorized use will be pursued on a case by case basis following discovery of suspected trespass. Resolution will include termination of use and payment of damages including reclamation of disturbed land, if needed. In some cases, use may be authorized through granting rights-of-way, or permits, or through land disposal.
13. BLM will continue to avoid jeopardizing the continued existence of any federal-listed or state-listed or proposed species and actively promote species recovery, and will work to continue to improve the status of candidate and sensitive species.
14. BLM will continue to give priority to the designation and protection of ACECs through cooperation with other agencies and groups, including the California Interagency Natural Areas Coordinating Committee. See Appendix C for discussion of coordination efforts and the importance and relevance of each ACEC considered in the management area alternatives.
15. Unless modified by a particular alternative, the management of livestock grazing will follow prescriptions of the Otay Grazing (EIS) Record of Decision which is incorporated by reference and summarized in Appendix G.
16. The California Department of Forestry and Fire Protection (CDF) is responsible for fire suppression on most of the BLM-administered lands within the planning area. Fire suppression on public lands within Los Angeles and Orange Counties is the responsibility of the two

respective county fire departments. Deviations from the existing suppression policy, as outlined in the CDF/BLM/U.S. Forest Service operating plan, will be made on a site specific basis, including activity level planning, and incorporated into the BLM's California Desert District Fire Management Activity Plan. Maintenance of the District's Fire Management Activity Plan will be used as the procedure to develop protection criteria to meet resource management objectives.

17. Management actions will be conducted in a manner which conform to the objectives and strategies of the South Coast Air Quality Management District and the San Diego Air Pollution Control District for attainment of federal and State air quality standards.
18. Management actions will be conducted in a manner which conform to Regional and State Water Quality Control Board objectives which have been developed as required by the 1987 Water Quality Act Amendments to the Federal Water Pollution Control Act. Best management practices (BMPs) will be developed as needed under the guidance of the California BLM 208 Water Quality Management Plan, the State's Non-point Source Program and coordination with the responsible Regional Water Quality Control Board.
19. Measures for minimizing accelerated soil erosion will continue to be made on a site specific basis through evaluation of management actions.
20. All management actions will comply with the National Historic Preservation Act of 1966, which provides for protection of significant cultural resources. An appropriate level of inventory will be done for all actions with a potential to affect these resources.
21. The BLM will identify and consider Native American concerns where actions might affect socio-cultural or religious values.

## Planning Area-wide Decisions

1. Lands not identified as available for disposal in the plan alternatives are available in order of priority as follows:
  - For cooperative management with local governments and/or private organizations, provided that proposed management conforms to plan objectives and land use allocations.
  - For Recreation and Public Purposes Act (R&PP) leases.

Actions such as permits and leases, including R&PP leases, will be considered providing the proposed use conforms to plan objectives and land use allocations.

2. No public lands within the planning area are available for agricultural entry under either Desert Land Entry (43 CFR 2520) or Indian Allotment (43 CFR 2530) due to one or more of the following factors: unsuitable soils, lack of water supplies, rugged topography, lack of access, small parcel size and presence of sensitive resources,
3. Utility corridors are not identified because of the low percentage of BLM public land ownership within the planning area. Those parcels of BLM-administered land which contain existing utility or transportation corridors are identified in Appendix I. Right-of-way avoidance areas, however, are identified in the alternatives to provide for protection of sensitive resources. Right-of-way proposals outside of avoidance areas will be open to normal case by case evaluation.
4. All parcels identified as available for disposal are right-of-way avoidance areas if the granting

## Chapter 2 - Alternatives

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of a right-of-way would adversely affect parcel marketability.

5. Review of withdrawals and classifications will be completed upon expiration and/or when they are no longer fulfilling their intended purpose or are not needed. Withdrawal review needed to meet management objectives is specifically identified in some of the management area alternatives. Existing withdrawals and classifications are listed in Appendix F.
6. Unless specifically prohibited by a particular alternative (or existing withdrawal) all BLM-administered public lands (including federal mineral split-estate lands) are available for mineral material sales.
7. Unless specifically prohibited by a particular alternative (or existing withdrawal) all BLM-administered public lands (including federal mineral split-estate lands) are available for mineral leasing, subject to applicable stipulations.
8. Unless specifically prohibited by an existing withdrawal or withdrawal proposed by a particular alternative, all public lands are open to entry under the Mining Law of 1872.
9. The harvesting of live plants for firewood is not allowed except for salvage operations which may be approved on a site specific basis.
10. The harvesting of any sensitive species is prohibited, except when explicitly authorized for scientific purposes by the appropriate state and/or federal agency.
11. Prescribed burning is generally allowed. Resource condition objectives requiring prescribed burning are identified in the management area alternatives.
12. Within previously disturbed sites and within 25 feet of existing routes of travel, stopping, parking, and camping are permitted on BLM-administered lands unless otherwise designated.

## San Diego County Management Area

### Alternatives

Four alternatives were developed for this management area. They provide decision makers with a range of realistic and distinct options relating to the identified issues: 1. Land tenure adjustment and use authorizations, 2. Threatened, endangered and other sensitive species, 3. Open space, and 4. Recreation and public access.

1. **No Action (Continuation of Present Management).** Stresses management efficiency while protecting natural values and providing recreation opportunities. Allows recreation, mineral development and other uses, consistent with policy and management objectives.
2. **Administrative Adjustments.** Maximizes disposal and transfer of public lands. Provides for protection of sensitive resources in all management actions, including disposal and transfer. Allows recreation, mineral development and other uses, consistent with policy and management objectives.
3. **Sensitive Species, Open Space and Recreation.** Maximizes protection and enhancement of sensitive species, wildlife and open space values. Directs management to areas with sensitive resource values. Allows compatible recreation and other uses, consistent with policy and sensitive species management objectives.
4. **Use Opportunities.** Maximizes enhancement of opportunities for intensive recreation use. Directs management to areas with potential for recreation use while protecting sensitive resources. Other land uses are allowed, consistent with policy and management objectives.

## Alternative 1 - No Action (Continuation of Present Management)

### Resource Condition Objectives

1. Improve management effectiveness through disposal of small and isolated parcels and consolidation of public land ownership in the Otay Mountain and Hauser Mountain areas.
2. Provide limited opportunities for dispersed recreation use.
3. Meet the objectives of the Otay Grazing Statement.

### Land Use Allocations

1. Acquire privately owned inholdings (1,300) acres within the Otay Mountain and Hauser Mountain areas.
2. A total of 16,362 acres of mostly small and isolated parcels are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA. (Refer to Glossary for definition of disposal criteria). Of this total, however, there are 12 parcels with 12,055 acres which are currently leased under the R&PP Act.
3. A total of 9,081 acres, consisting of unconsolidated parcels and small parcels adjacent to the Cleveland National Forest, are suitable for disposal including private exchange but not sale.
4. The existing Otay National Land and Wildlife Management Area withdrawal (PLO 2693) will be continued.
5. Public lands are open to dispersed recreation use as part of the South Coast Extensive Recreation Management Area. Other than acquisition of public access to the larger parcels, such as Otay and Hauser Mountains, no development of recreational facilities is provided.
6. Until such time as vehicle route designation takes place, motorized vehicle use will be limited to existing routes of travel.
7. Livestock grazing allocations from the Otay Grazing Statement are maintained for existing allotments (see Map 2-1) as follows:

Cameron: 34 AUMs  
Clover Flat: 715 AUMs  
Dogpatch: 15 AUMs  
Dulzura: 40 AUMs  
Hauser Mountain: 66 AUMs  
La Posta: 23 AUMs  
Mother Grundy: 72 AUMs  
Otay Mountain: 222 AUMs  
Potrero: 726 AUMs  
Skunk Hollow: 20 AUMs  
The Narrows: 6 AUMs

Lands identified as suitable for disposal are closed to grazing applications. Where grazing use currently occurs on such parcels, grazing leases and preferences will be cancelled following two years prior notification. The existing allotments which would be eliminated due to land disposal

### Land Use Allocations, (cont.)

actions are Dogpatch, Mother Grundy and Skunk Hollow.

8. Management actions will conform to visual resource management (VRM) Class 3 objectives.

### Management Actions

1. Publish Federal Register notice for vehicle route designations.
2. Prepare Allotment Management Plans for the four category I allotments; that is Clover Flat, Hauser Mountain, Otay Mountain and Potrero.
3. Conduct prescribed burning for increased forage production.
4. Prepare feasibility reports for land exchanges, disposals and acquisitions.



## Alternative 2 - Administrative Adjustments

### Resource Condition Objectives

1. Improve management effectiveness through transfer and disposal of lands, including land exchanges to provide for consolidation of public land ownership in other management areas.

### Land Use Allocations

1. A total of 25,775 acres of mostly small, isolated parcels are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA (Refer to Glossary for definition of disposal criteria). Of this total, however, there are 12 parcels with 12,055 acres which are currently leased under the R&PP Act.
2. A total of 6,832 acres, consisting of unconsolidated parcels and small parcels adjacent to the Cleveland National Forest, are suitable for disposal including private exchange but not sale.
3. A total of 32,091 acres of land are not suitable for private exchange or sale, but are considered potentially suitable for jurisdictional exchange with the U. S. Forest Service.
4. Public lands are open for dispersed recreation use as part of the South Coast Extensive Recreation Management Area. No development of recreational facilities is provided.
5. Until such time as vehicle route designation takes place, motorized vehicle use will be limited to existing routes of travel.
6. The livestock grazing allocations are the same as described for Alternative 1. Lands identified as suitable for disposal are closed to grazing applications. Where grazing use currently occurs on such parcels, grazing leases and preferences will be cancelled following two years prior notification. The existing allotments which would be eliminated due to lands disposal actions are Cameron, Dogpatch, La Posta, Mother Grundy, Skunk Hollow and The Narrows.
7. Management actions will conform to VRM Class 3 objectives.

### Management Actions

1. Publish Federal Register notice for vehicle route designations.
2. Contact the U.S. Forest Service concerning the suitability of lands for transfer of jurisdiction and notify local agencies regarding availability of lands identified for disposal.
3. Prepare exchange feasibility and land reports for land exchanges and disposals.

## Alternative 3 - Sensitive Species, Open Space and Recreation (Preferred Alternative)

### Resource Condition Objectives

1. Emphasize protection and enhancement of sensitive species habitat and open space values.
2. Improve management effectiveness within the management area through disposal of isolated parcels and consolidation of public land ownership.
3. Enhance habitats for all wildlife species, including deer and quail.
4. Provide opportunities for low-impact recreation through provision of facilities and services.
5. Protect Native American values associated with Kuchamaa (Tecate Peak).

### Land Use Allocations

1. Designate 705 acres in Cedar Canyon as an Area of Critical Environmental Concern (ACEC) and Research Natural Area (RNA) for preservation of populations of Mexican flannelbush.
  - Acquire 280 acres for addition to the ACEC.
  - The ACEC is a right-of-way avoidance area, is not available for mineral material sales or livestock grazing and is closed to motorized vehicle use.
2. Designate 355 acres at Tecate Peak and 269 acres at Little Tecate Peak as the Kuchamaa ACEC and Outstanding Natural Area (ONA) for the protection of Native American religious heritage.
  - Acquire approximately 500 acres for addition to the ACEC.
  - The ACEC is a right-of-way avoidance area, is not available for mineral material sales or livestock grazing and motorized vehicle use within the ACEC is limited to the existing route shown in Map 2-2.
  - Explore the feasibility of relocating or removing the existing communication site facilities on Tecate Peak.
3. Manage the contiguous public lands in the Hauser Mountain and McAlmond Canyon vicinities (parcels 292-251 and 293-331), including portions of the Potrero and Hauser Mountain grazing allotments, as a wildlife habitat management area (HMA).
  - Acquire approximately 580 acres containing riparian habitat in McAlmond Canyon.
  - To enhance wildlife habitat, conduct vegetation manipulation (prescribed burning), as needed to maintain 20% of vegetation as early seral communities as a means of enhancing wildlife habitat and increasing forage.
4. Manage parcels in the vicinity of Fern Creek, De Luz Creek, Rainbow Creek and the Santa Margarita River (parcels 216-361, 217-261, 228-031 and 228-101) for conservation of riparian values.

**Chapter 2 - Alternatives**  
**San Diego County Management Area**

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**Land Use Allocations, (cont.)**

- The 773 acre Fern Creek parcel (No. 216-361) is closed to motorized vehicle use.
  - The lands are not available for livestock grazing.
5. Administer lands within the Border Mountains area as a special recreation management area (SRMA). The physical, social and managerial settings to be maintained for the SRMA are as follows:
- The area is characterized by a corridor of land from the Otay Mountain vicinity on the west to the Campo vicinity on the east. The public lands within the corridor are predominantly represented by an unmodified natural environment. On adjoining lands the sights and sounds of man are often readily evident.
  - Concentration of users is low, although there is often evidence of other area users.
  - Facilities are provided for protection of resource values and safety of users. Spacing of groups may be formalized to disperse use and limit contacts between groups.
- The SRMA provides opportunities for equestrian use, hiking, backpacking, camping, picnicking, nature study and hunting.
6. Should the existing R&PP Act leases be terminated or relinquished, manage lands currently leased by the City and the County of San Diego for natural values and compatible recreation use, giving priority to cooperative management, including the following areas:
- Hellhole Canyon (parcel 247-011)
  - Lakeside (parcel 269-251)
  - San Pasqual (parcels 255-231 and 256-311)
  - Swartz Canyon (parcel 264-191)
7. Acquire privately owned inholdings (1,300) acres within the Otay Mountain and Hauser Mountain areas and consolidate public land ownership to establish a corridor of public land ownership in the Border Mountains area.
8. A total of 1,901 acres of small and isolated parcels are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA (Refer to Glossary for definition of disposal criteria). Of this total, however, there are six parcels with 740 acres which are currently leased under the R&PP Act.
9. A total of 851 acres, consisting of small parcels adjacent to the Cleveland National Forest are suitable for disposal including private exchange but not sale.
10. A total of 10,658 acres are available for exchange only for the purpose of consolidating ownership to establish a corridor of public lands within the Border Mountains area.
11. A total of 720 acres, not available for disposal from federal ownership, are considered suitable for jurisdictional exchange with the U.S. Forest Service.

## Land Use Allocations, (cont.)

12. The existing Otay National Land and Wildlife Management Area withdrawal (PLO 2693) will be continued.
13. As described in Land Use Allocations No. 1 and 4, a total of 1,498 acres are closed to motorized vehicle use; and as described in Land Use Allocation No 2, use of the 624 acres of the Kuchamaa ACEC is limited to the existing route shown in Map 2-2. For other public lands, until such time as vehicle route designation takes place, motorized vehicle use will be limited to existing routes of travel.
14. The livestock grazing allocations are the same as described for Alternative 1 except that the Cedar Canyon ACEC is excluded from the existing Otay Mountain allotment; and the existing preference is reduced from 222 to 194 AUM's. Lands identified as suitable for disposal are closed to grazing applications. Where grazing use currently occurs on such parcels, grazing leases and preferences will be adjusted or cancelled following two years prior notification. The existing allotments which would be eliminated due to land disposal actions are Cameron, Dogpatch, La Posta and The Narrows.

In addition, the following standards for livestock grazing are established:

- 50% maximum utilization of perennial grasslands current year's growth.
- 25% maximum utilization of current year's growth of riparian vegetation.
- Minimum residual dry matter (RDM) of 500 lb/acre for all annual grassland areas.
- Prescribed burning for livestock forage production is not allowed in riparian areas and in areas which are identified by the Soil Conservation Service (Knecht, 1971) as unsuitable for type conversion and/or as characterized by soils with high erodibility potential.
- Prescribed burning east of the Minnewawa Truck Trail on the Otay Mountain allotment is not allowed until the year 2020 in order to minimize the risk of jeopardizing the regeneration of Tecate Cypress.

The need for any future adjustments will be based on these standards and monitoring.

15. Management actions will conform to VRM Class 2 objectives within ACECs and VRM Class 3 objectives in other areas.

## Management Actions

1. Publish Federal Register notice for ACEC designations.
2. Publish Federal Register notice for vehicle route designations.
3. Prepare ACEC plans for Cedar Canyon and Kuchamaa.
4. Prepare a coordinated activity level plans for wildlife habitat and livestock grazing management in the Hauser Mountain and McAlmond Canyon vicinities (involving the Potrero and Hauser Mountain grazing allotments).

**Chapter 2 - Alternatives**  
**San Diego County Management Area**

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**Management Actions, (cont.)**

5. Prepare an activity plan for management of the riparian habitat on the parcels in the vicinity of Fern Creek, Rainbow Creek, De Luz Creek, and the Santa Margarita River.
6. Prepare an activity plan for the Border Mountains SRMA.
7. Prepare feasibility reports for exchanges, disposal and acquisitions.
8. Acquire land and access easements.
9. Conduct prescribed burning for wildlife habitat and range improvement objectives.
10. Establish water source improvements for wildlife habitat and range improvement objectives.
11. Pursue cooperative partnerships with San Diego County, other local governments and other organizations and groups for providing open space preservation and recreational opportunities.
12. Develop recreational facilities.

## Alternative 4 - Use Opportunities

### Resource Condition Objectives

1. Emphasize providing opportunities for a wide range of recreation uses through provision of facilities and services.
2. Improve management effectiveness within the management area through disposal of isolated parcels and consolidation of public land ownership.
3. Provide protection of sensitive species and open space values.
4. Meet objectives of the Otay Grazing Statement.
5. Protect Native American values associated with Kuchamaa (Tecate Peak).

### Land Use Allocations

1. Administer lands within the Border Mountains area as a special recreation management area (SRMA). The physical, social and managerial settings to be maintained for the SRMA are as follows:
  - The area is characterized by a corridor of land from the Otay Mountain vicinity on the west to the Campo vicinity on the east. The public lands within the corridor are predominantly represented by an unmodified natural environment, although in some locations there is moderate evidence of the sights and sounds of man. In some areas resource modification and utilization practices are evident, but harmonized with the natural environment. On adjoining lands the sights and sounds of man are often readily evident.
  - Concentration of users is low in most areas, but is moderate or even high at times in locations with facilities provided for group activities.
  - Facilities are provided for protection of resource values and safety of users. Spacing of groups may be formalized to disperse use and limit contacts between groups. In some locations rustic facilities are provided for user convenience and on-site controls and restrictions offer a sense of security. Opportunities for motorized vehicle use exist. In some locations, conventional motorized use is provided for in construction standards and design of facilities.

The SRMA provides opportunities for equestrian use, hiking, backpacking, camping, picnicking, nature study and hunting.
2. Designate 705 acres in Cedar Canyon as an Area of Critical Environmental Concern (ACEC) and Research Natural Area (RNA) for preservation of populations of Mexican flannelbush.
  - Acquire 280 acres for addition to the ACEC.
  - The ACEC is a right-of-way avoidance area, is not available for mineral material sales or livestock grazing and is closed to motorized vehicle use.
3. Designate 355 acres at Tecate Peak as the Kuchamaa ACEC and Outstanding Natural Area (ONA) for protection of Native American religious heritage.

## **Land Use Allocations, (cont.)**

- Acquire approximately 110 acres for addition to the ACEC.
  - The ACEC is a right-of-way avoidance area, is not available for mineral material sales or livestock grazing and motorized vehicle use within the ACEC is limited to the existing route shown in Map 2-2.
  - Explore the feasibility of relocating or removing the existing communication site facilities on Tecate Peak.
4. In addition to existing communication sites on Otay Mountain (parcel 299-011) and Red Mountain (parcel 228-151), Rocky Peak (parcel 216-251) and Burnt Mountain (parcel 246-221) are identified as locations suitable for siting of communications facilities.
  5. Acquire privately owned inholdings (1,300) acres within the Otay Mountain and Hauser Mountain areas and consolidate public land ownership for establishing a corridor of public land ownership in the Border Mountains area.
  6. A total of 2,441 acres of small and isolated parcels are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA (Refer to Glossary for definition of disposal criteria). Of this total, however, there are six parcels with 740 acres which are currently leased under the R&PP Act.
  7. A total of 1,451 acres, consisting of small parcels adjacent to the Cleveland National Forest are suitable for disposal including private exchange but not sale.
  8. A total of 10,978 acres are available for exchange only for the purpose of consolidating ownership to establish a corridor of public lands within the Border Mountains area.
  9. A total of 120 acres, not available for disposal from federal ownership, are considered suitable for jurisdictional exchange with the U. S. Forest Service.
  10. The existing Otay National Land and Wildlife Management Area withdrawal (PLO 2693) will be continued.
  11. As described in Land Use Allocation No. 2, a total of 705 acres are closed to motorized vehicle use; and as described in Land Use Allocation No. 3, use of the 355 acres within the Kuchamaa ACEC is limited to the existing route shown in Map 2-2. For other public lands, until such time as vehicle route designation takes place, motorized vehicle use will be limited to existing routes of travel.
  12. The livestock grazing allocations are the same as described for Alternative 1 except that the Cedar Canyon ACEC is excluded from the existing Otay Mountain allotment; and the existing preference is reduced from 222 to 194 AUM's. Lands identified as suitable for disposal are closed to grazing applications. Where grazing use currently occurs on such parcels, grazing leases and preferences will be adjusted or cancelled following two years prior notification. The existing allotments which would be eliminated due to land disposal actions are Cameron, Dogpatch, La Posta and The Narrows.
  13. Management actions will conform to VRM Class 3 objectives.

## Management Actions

1. Publish Federal Register notice for ACEC designations.
2. Publish Federal Register notice for vehicle route designations.
3. Prepare ACEC plans for Cedar Canyon and Kuchamaa.
4. Prepare Allotment Management Plans for the four category I allotments; that is Clover Flat, Hauser Mountain, Otay Mountain and Potrero.
5. Prepare an activity plan for the Border Mountains SRMA.
6. Prepare feasibility reports for exchanges, disposal and acquisitions.
7. Prepare communications site plans.
8. Acquire land and access easements.
9. Conduct prescribed burning for range improvement objectives.
10. Develop water sources for range improvement objectives.
11. Pursue cooperative partnerships with San Diego County, other local governments and other organizations groups for providing recreational opportunities.
12. Develop recreational facilities.

## Rationale for the Preferred Alternative

**Alternative 3 - Sensitive Species, Open Space and Recreation is the Preferred Alternative.** The public lands within the management area contain a wide variety of resource values ranging from wildlife, including sensitive species habitat, to a site of religious significance to Native Americans to areas with potential to provide increased opportunities for recreation use.


The primary benefit of the preferred alternative is recognition of the values associated with the public lands, and provision for retention, consolidation and more intensive management of the land base. Management of wildlife habitat is provided by identification of two areas for habitat management and also by designation of the Cedar Canyon ACEC for protection of sensitive plant populations. In addition, protection of important Native American religious values is provided by designation of the Kuchamaa ACEC. Opportunities for increased recreation use are provided by identification of the Border Mountains Special Recreation Management Area (SRMA) and management direction to pursue opportunities for cooperative management with local governments including both the City and County of San Diego.




MAP 2-1

San Diego County  
Management Area

Livestock Grazing  
Allotments

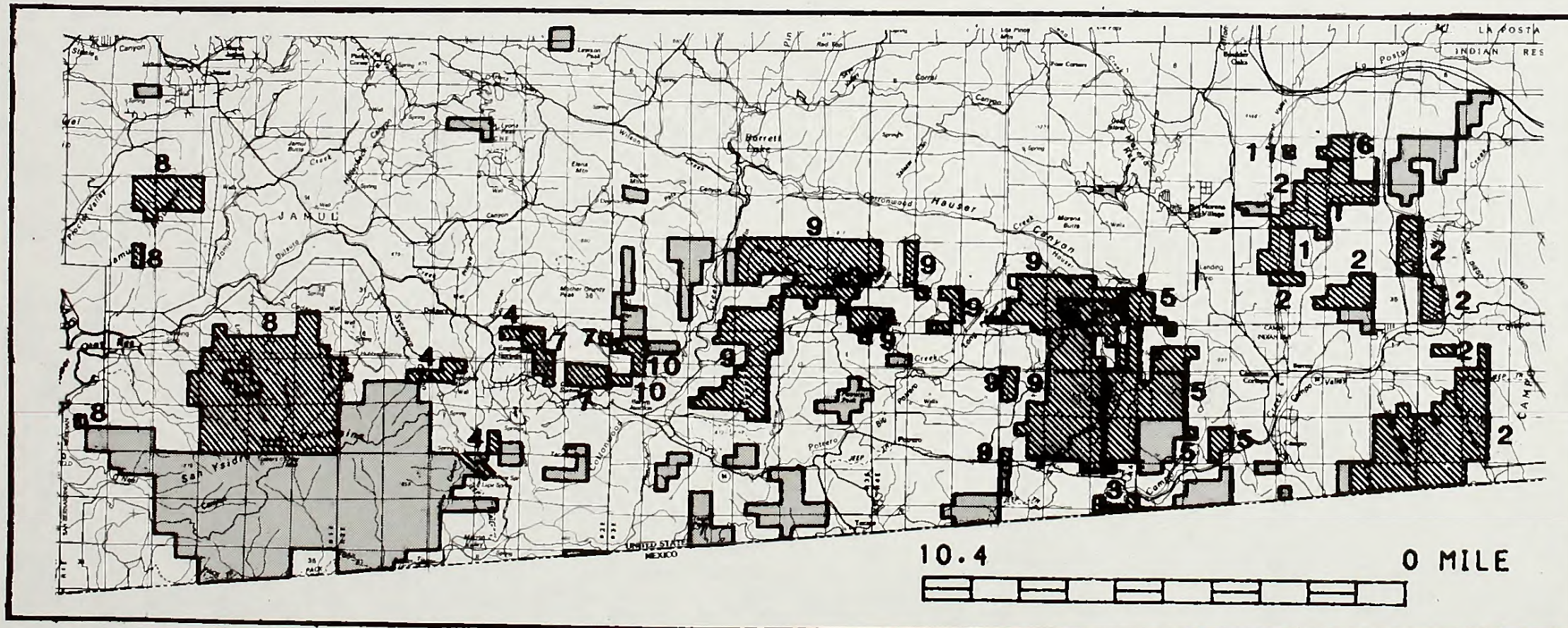
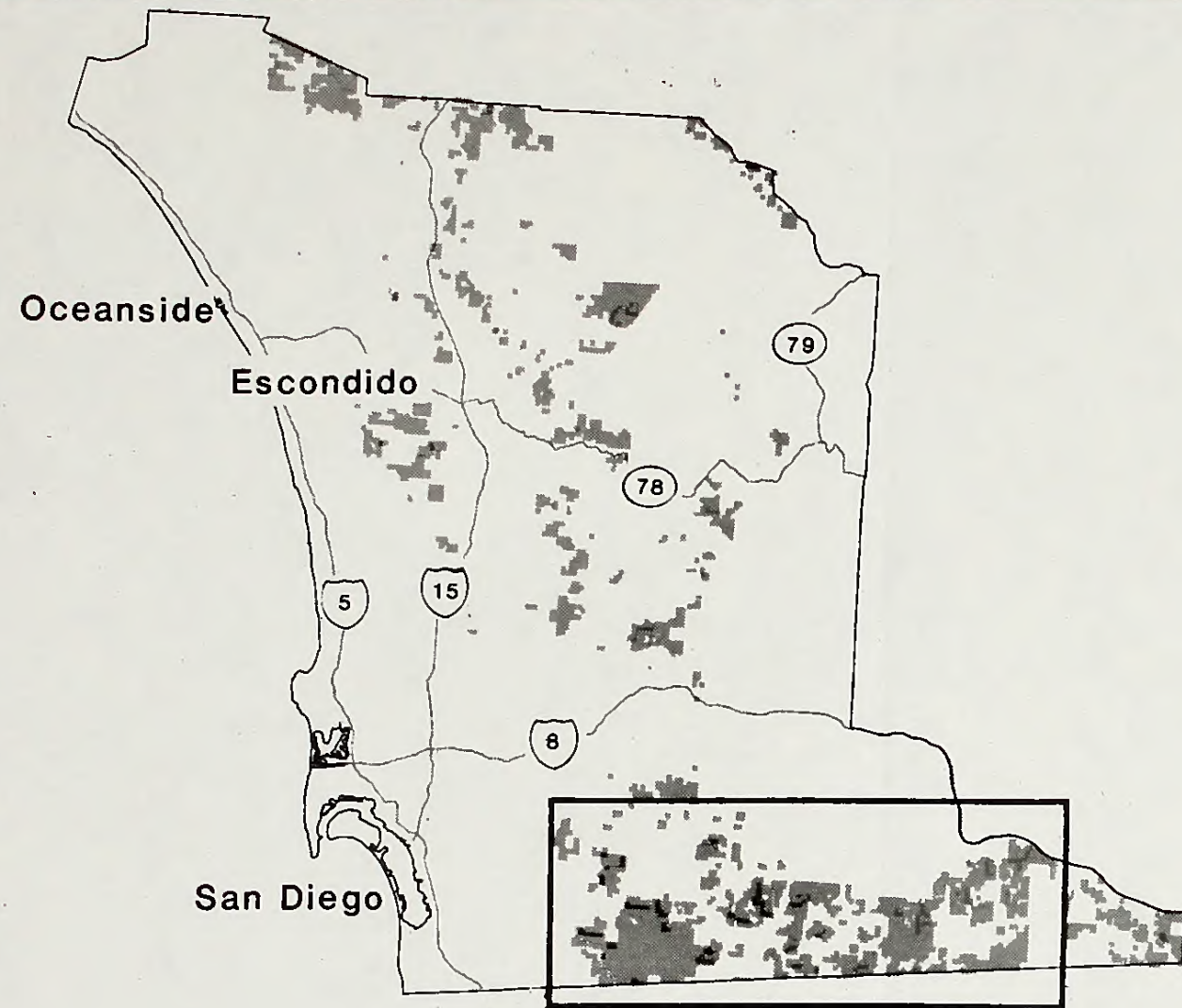
 Grazing Allotments

 BLM/Public Lands  
(Including Split Estate  
Lands)

Grazing Allotments

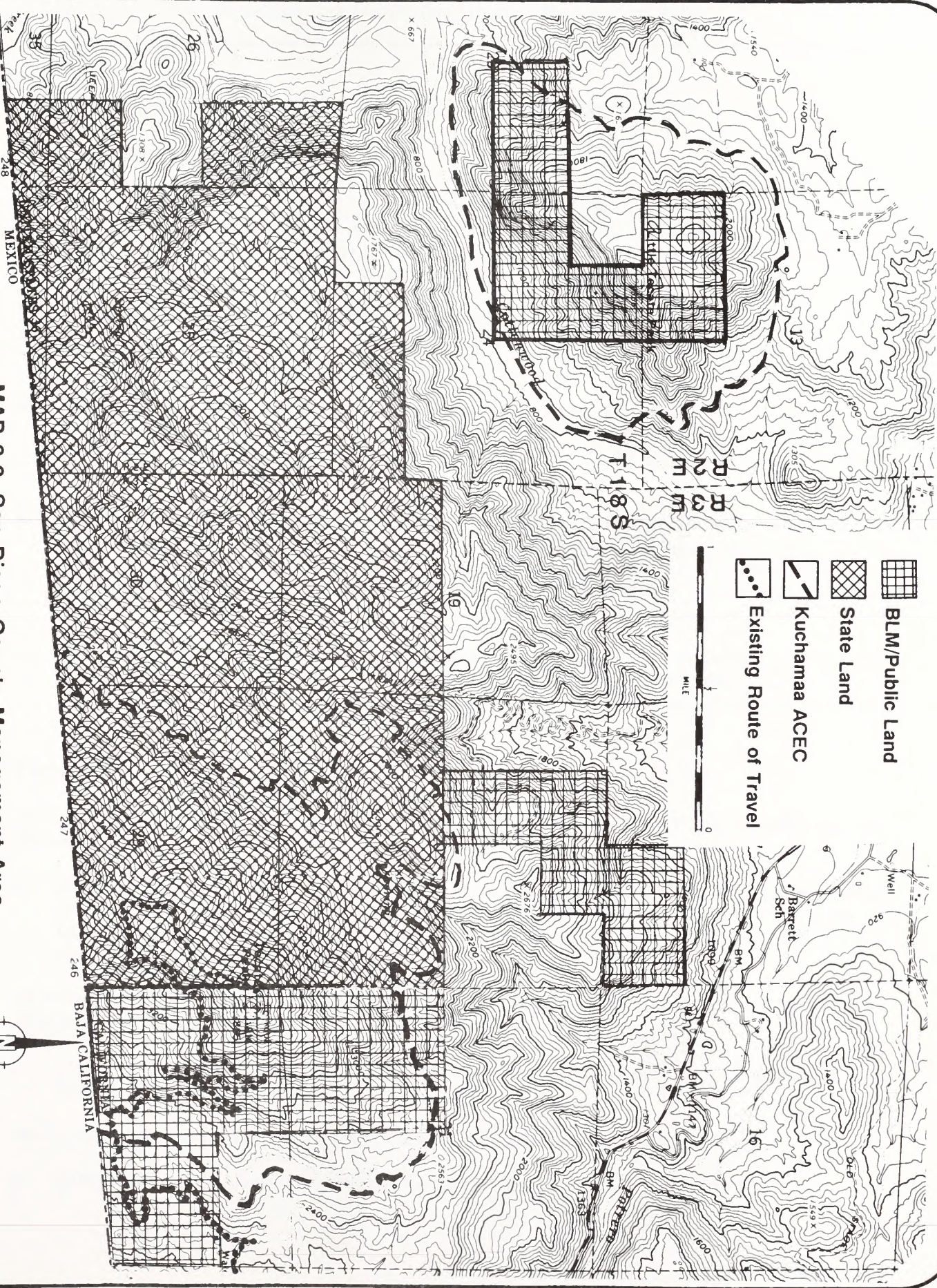
- 1-Cameron
- 2-Clover Flat
- 3-Dogpatch
- 4-Dulzura
- 5-Hauser Mountain
- 6-La Posta
- 7-Mother Grundy
- 8-Otay Mountain
- 9-Potrero
- 10-Skunk Hollow
- 11-The Narrows





Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area





**MAP 2-2. San Diego County Management Area  
Kuchamaa Area of Critical Environmental Concern**



-  BLM/Public Land
-  State Land
-  Kuchamaa ACEC
-  Existing Route of Travel





## **Riverside-San Bernardino County Management Area**

### **Alternatives**

Four alternatives were developed for this management area. They provide decision makers with a range of realistic and distinct options relating to the identified issues: 1. Land tenure adjustment and use authorizations, 2. Threatened, endangered and other sensitive species, 3. Open space, 4. Recreation and public access, and 5. Minerals.

1. **No Action (Continuation of Present Management).** Provides protection and enhancement of sensitive species and their habitats. Allows recreation, mineral development and other uses, consistent with policy and management objectives.
2. **Administrative Adjustments.** Maximizes disposal and transfer of public lands. Provides for protection of sensitive species habitat in all management actions, including disposal and transfer. Allows recreation, mineral development and other uses, consistent with policy and management objectives.
3. **Sensitive Species, Open Space and Recreation.** Maximizes protection and enhancement of sensitive species and their habitats, wildlife, open space, watershed and other natural values. Directs management to areas with sensitive species management potential. Allows compatible recreation, mineral development and other uses, consistent with policy and sensitive species management objectives.
4. **Use Opportunities.** Provides for enhancement of opportunities for intensive recreation use. Directs management to areas with potential for recreation use. Provides enhancement of sensitive species habitat. Allows mineral development and other uses, consistent with policy and management objectives.

### **Features Common to All Alternatives**

All of the alternatives provide protection of wild and scenic river values with the following land use allocation:

1. Manage the segments of the Santa Margarita River (see Map 2-3) which are eligible for inclusion in the National Wild and Scenic Rivers System (NWSRS) in accordance with the interim guidance for protection of wild and scenic values as presented in Appendix E, and pursue determination of suitability for inclusion in the NWSRS.

All of the alternatives provide for reducing user conflicts and for protection of Stephens' kangaroo rat habitat at Canyon Lake as follows:

2. The motorized vehicle use designations for the Canyon Lake parcel (176-261) are shown in Map 2-4.

All of the alternatives provide for managing public lands in the Poppet Flat vicinity for multiple use.

3. Modification of the existing Poppet Flat withdrawal (PLO 3221) will be pursued.

## **Alternative 1 - No Action (Continuation of Present Management)**

### **Resource Condition Objectives**

1. Improve manageability of Stephens' kangaroo rat habitat and protect populations of Santa Ana River woolly-star and slender-horned spineflower.
2. Improve management effectiveness within the management area through disposal of lands and consolidation of public land ownership in the Steele Peak area.
3. Provide limited opportunities for dispersed recreation use.
4. Allow oil and gas leasing while providing protection of sensitive resources.
5. Meet the objectives of the Otay Grazing Statement.

### **Land Use Allocations**

1. Manage the Steele Peak area for enhancement of Stephens' kangaroo rat habitat.
  - Acquire 3,820 acres within the Steele Peak study reserve as identified in the Stephens' kangaroo rat habitat conservation plan.
  - The area outside the existing allotment boundary is unavailable for livestock grazing, pending completion of an activity plan. Grazing could be permitted if found compatible with livestock grazing as determined in the activity plan.
2. Manage upper Santa Ana River wash parcels for protection of Santa Ana woolly-star and slender-horned spineflower.
  - The 1,040 acre area (parcels 107-021, 107-101, 107-121 and 108-081) is closed to motorized vehicle use and to livestock grazing.
3. A total of 8,438 acres of mostly small and isolated parcels are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA (Refer to Glossary for definition of disposal criteria).

Within this 8,438 acres are 250 acres (two parcels) which are available only if sensitive resources are protected or compensated as a condition of disposal. One parcel (190-321) of 200 acres contains Least Bell's Vireo habitat, and one parcel (208-181) has high potential for the occurrence of slender-horned spineflower.

4. A total of 3,820 acres, are available for disposal by exchange but not sale. Availability for exchange is on the condition that either the exchange be used to accomplish Steele Peak acquisitions, or that exchange out of federal ownership not take place until the acquisition threshold identified in Land Use Allocation No. 1 is attained.
5. A total of 360 acres (parcel 220-191) within the Agua Tibia Wilderness Study Area (WSA) is not available for disposal from federal ownership, but is considered suitable for jurisdictional

**Chapter 2 - Alternatives**  
**Riverside-San Bernardino County Management Area**

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**Land Use Allocations, (cont.)**

exchange with the U. S. Forest Service.

6. Public lands are open to dispersed recreation use as part of the South Coast Extensive Recreation Management Area. Other than acquisition of public access to the larger parcels, such as the Poppet Flat area, no development of recreational facilities is provided.
7. A total of 2,305 acres are closed to motorized vehicle use including the 1,040 acres identified in Land Use Allocation No. 2 and the areas described below. Vehicle route designations for the 640 acre Canyon Lake parcel (176-261) are shown in Map 2-4.
  - The 360 acre Agua Tibia WSA is closed to protect wilderness values.
  - Parcel 180-111 (545 acres) near the San Jacinto River and Valle Vista is closed to help protect adjacent populations of slender-horned spinyflower.
  - The 360 acres within Santa Margarita River parcels (218-231 and 218-331) are closed for protection of wild and scenic river values and sensitive riparian habitat.

For other public lands, until such time as vehicle route designation takes place, motorized vehicle use will be limited to existing routes of travel.

8. Livestock grazing allocations from the Otay Grazing Statement are maintained for existing allotments as follows:

Diamond Valley: 20 AUMs  
Rawson Valley: 6 AUMs  
Steele Peak: 132 AUMs

Lands identified as suitable for disposal are closed to grazing applications. Where grazing use currently occurs on such parcels, grazing leases and preferences will be cancelled following two years prior notification. The existing allotments which would be eliminated due to land disposal actions are Diamond Valley and Rawson Valley.

9. All public lands are open to oil and gas leasing. The following No Surface Occupancy (NSO) stipulations are applied to new oil and gas leases for protection of federally listed and candidate species.
  - Slender-horned spinyflower
  - California Gnatcatcher
  - Stephens' kangaroo rat
  - Least Bell's Vireo

See Maps 2-5 and 2-6 for the area covered by each stipulation and Appendix D for a full description of each stipulation.

10. Management actions will conform to visual resource management (VRM) Class 3 objectives, except that Class 1 will apply under interim management of the eligible segments of the Santa Margarita River.

**Chapter 2 - Alternatives**  
**Riverside-San Bernardino County Management Area**

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**Management Actions**

1. Publish Federal Register notice for vehicle route designations.
2. Prepare feasibility reports for land exchanges, disposal and acquisitions.
3. Prepare allotment management plan for the Steele Peak allotment.



## **Alternative 2 - Administrative Adjustments**

### **Resource Condition Objectives**

1. Improve management effectiveness through transfer and disposal of lands and provide for consolidation of public land ownership in other management areas.
2. Provide management to protect populations of Santa Ana River woolly-star and slender-horned spineflower.
3. Allow oil and gas leasing while providing protection of sensitive resources.

### **Land Use Allocations**

1. Manage upper Santa Ana River wash parcels for protection of Santa Ana River woolly-star and slender-horned spineflower.
  - The 1,040 acre area (parcels 107-021, 107-101, 107-121 and 108-081) is closed to motorized vehicle use and to livestock grazing.
2. A total of 15,587 acres of mostly small isolated parcels and some larger but unconsolidated public lands are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA (Refer to Glossary for definition of disposal criteria).

Within this total there are 3,652 acres which are available only if sensitive resources are protected or compensated as a condition of disposal. A number of these parcels (3,402 acres total) are within Stephens' kangaroo rat reserve study sites. One parcel (190-321) of 200 acres contains Least Bell's Vireo habitat, and one parcel (180-271) has high potential for the occurrence of slender-horned spineflower.

3. A total of 4,676 acres, consisting of parcels adjacent to the San Bernardino National Forest, are not available for sale but are available for private exchange or jurisdictional exchange between the U. S. Forest Service and BLM.
4. A total of 9,369 acres of land are not suitable for private exchange or sale, but are considered potentially suitable for jurisdictional exchange with the U. S. Forest Service.
5. Vehicle route designations are the same as in Alternative 1.
6. The livestock grazing allocations are the same as described for Alternative 1. Lands identified as suitable for disposal are closed to grazing applications. Where grazing use currently occurs on such parcels, grazing leases and preferences will be cancelled following two years prior notification. All three of the existing allotments which would be eliminated due to land disposal actions.
7. Availability of public lands for oil and gas leasing is the same as described for Alternative 1.
8. Management actions will conform to VRM Class 3 objectives, except that Class 1 objectives will apply under interim management of the eligible segments of the Santa Margarita River.

**Chapter 2 - Alternatives**  
**Riverside-San Bernardino County Management Area**

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**Management Actions**

1. Publish Federal Register notice for vehicle route designations.
2. Contact other federal agencies concerning the suitability of lands for jurisdictional transfer and notify local agencies regarding availability of lands identified for disposal.
3. Prepare exchange feasibility and land reports for land exchanges and disposal.

## Alternative 3 - Sensitive Species, Open Space and Recreation (Preferred Alternative)

### Resource Condition Objectives

1. Emphasize protection and enhancement of sensitive species habitats and open space values.
2. Improve management effectiveness within the management area through disposal of isolated parcels and consolidation of public land ownership, including substantial acquisition within the management area.
3. Provide recreation opportunities which are compatible with sensitive species management objectives.
4. Allow mineral development and other uses while maximizing protection of sensitive resources.

### Land Use Allocations

1. Designate 1,540 acres at Steele Peak as an Area of Critical Environmental Concern (ACEC) and Research Natural Area (RNA) for preservation of Stephens' kangaroo rat habitat.
  - Acquire 9,600 acres for addition to the ACEC.
  - The ACEC is unavailable for mineral material sales.
  - The area outside the existing allotment boundary is unavailable for livestock grazing, pending completion of an activity plan. Grazing could be permitted, if it is found to be compatible with habitat management, as determined in the activity plan.
  - Withdraw the ACEC from mineral leasing and entry under the 1872 mining law.
  - The ACEC is a right-of-way avoidance area.
2. Designate three parcels (107-021, 107-101, 107-121) in the upper Santa Ana River wash totalling of 760 acres as an ACEC/RNA for protection of Santa Ana River woolly-star and slender-horned spineflower.
  - The ACEC is unavailable for mineral material sales, closed to motorized vehicle use and is unavailable for livestock grazing.
  - The ACEC is a right-of-way avoidance area.
3. Designate 1,260 acres within the Santa Margarita Ecological Reserve (including 40 acres within San Diego County) as an ACEC and RNA for protection for sensitive species and natural values.
  - Acquire 300 acres for addition to the ACEC.
  - The ACEC is unavailable for mineral material sales and livestock grazing.

**Chapter 2 - Alternatives**  
**Riverside-San Bernardino County Management Area**

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**Land Use Allocations, (cont.)**

- Withdraw the ACEC from mineral leasing and entry under the 1872 mining law.
  - The ACEC is a right-of-way avoidance area.
  - A portion of the ACEC, 360 acres in parcels 218-231 and 218-331, are closed to motorized vehicle use.
4. Manage the Badlands area, located east of the city of Riverside, for multi-species values and open space.
- Acquire 1,000 acres of adjacent land to consolidate ownership and improve management.
  - The area is unavailable for livestock grazing, pending completion of an activity plan. Grazing could be permitted if found compatible with habitat management as determined in the activity plan.
5. Manage parcels at Oak Mountain for sensitive plant and wildlife species values.
- Acquire 640 acres for consolidation of sensitive plant habitat.
  - The three parcels in the Oak Mountain vicinity (the 888 acres in parcels 205-321, 205-341 and 220-041) are closed to motorized vehicle use and are unavailable for livestock grazing.
6. Manage land near Valle Vista and the San Jacinto River for the protection of slender-horned spinyflower populations.
- Acquire 300 acres of adjacent land containing known populations of slender-horned spinyflower.
  - Parcel 180-111 (545 acres) is closed to motorized vehicle use and is unavailable for livestock grazing.
7. Manage public lands within the Poppet Flat area as a special recreation management area (SRMA). The physical, social and managerial settings to be maintained for the SRMA are as follows:
- The area is characterized by a large block of land with an unmodified natural environment.  
  
From the periphery of the area, however, the sights and sounds of man may be readily apparent on adjoining lands.
  - Concentration of users is low, although there is often evidence of other area users.
  - Facilities are provided for protection of resource values and safety of users. Spacing of groups may be formalized to disperse use and limit contacts between groups. Opportunities for motorized vehicle use exist.
  - The SRMA provides opportunities for equestrian use, hiking, backpacking, camping, picnicking,

**Chapter 2 - Alternatives**  
**Riverside-San Bernardino County Management Area**

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**Land Use Allocations, (cont.)**

nature study and hunting.

8. Provide interim management, including cooperative management if feasible, in the Canyon Lake area to reduce user conflicts and protect sensitive habitat, pending expected land disposal.
9. A total of 5,019 acres of mostly small and isolated parcels are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA (Refer to Glossary for definition of disposal criteria). Within this total, there is one 200-acre parcel (190-321) with Least Bell's Vireo which is available only if suitable habitat is protected or compensated as a condition of disposal.
10. A total of 2,421 acres, consisting of parcels adjacent to the San Bernardino National Forest, are not available for sale but are available for private exchange or jurisdictional exchange between the U. S. Forest Service and BLM.
11. In addition to the lands identified as available for exchange in Land Use Allocation No. 9, a total of 4,367 acres, are available for disposal by exchange but not sale on the condition that either 1) exchange be used to accomplish Steele Peak acquisitions, or 2) that exchange out of federal ownership not take place until the acquisition goal identified for Steele Peak Reserve in Land Use Allocation No. 1 is attained.
12. The 360-acre Agua Tibia Wilderness Study Area (WSA), parcel 220-191, is not available for disposal from federal ownership, but is considered suitable for jurisdictional exchange with the U. S. Forest Service.
13. Vehicle route designations for the 640 acre Canyon Lake parcel (176-261) are shown in Map 2-4. A total of 3,193 acres are closed to motorized vehicle use including the 2,553 acres identified in Land Use Allocations No. 2, 3, 5 and 6 and the areas described below.
  - The 360-acre Agua Tibia WSA is closed to motorized vehicle use for preservation of wilderness values.
  - In addition to the 760 acres described in Land Use Allocation No. 2, a 280-acre parcel (108-081) in the Santa Ana River wash is closed.

For other public lands, until such time as vehicle route designation takes place, motorized vehicle use will be limited to existing routes of travel.

14. The livestock grazing allocations are the same as described for Alternative 1. Lands identified as suitable for disposal are closed to grazing applications. Where grazing use currently occurs on such parcels, grazing leases and preferences will be cancelled following two years prior notification. The existing allotments which would be eliminated due to land disposal actions are Diamond Valley and Rawson Valley.

In addition, the following standards for livestock grazing are established:

- 50% maximum utilization of perennial grasslands current year's growth.

**Chapter 2 - Alternatives**  
**Riverside-San Bernardino County Management Area**

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**Land Use Allocations, (cont.)**

- 25% maximum utilization of current year's growth of riparian vegetation.
- Minimum residual dry matter (RDM) of 500 lb/acre for all annual grassland areas.
- Prescribed burning for livestock forage production is not allowed in riparian areas and in areas which are identified by the Soil Conservation Service (Knecht, 1971) as unsuitable for type conversion and/or as characterized by soils with high erodibility potential.

Future adjustments will be based on these standards and monitoring.

15. All public lands, except for existing withdrawals and lands affected by withdrawals proposed in Land Use Allocations No. 1 and 3, are open to oil and gas leasing. The following No Surface Occupancy (NSO) stipulations are applied to new oil and gas leases for protection of federally listed and candidate species.
  - Slender-horned spineflower
  - Black-tailed Gnatcatcher
  - Stephens' kangaroo rat
  - Least Bell's Vireo

See Maps 2-5 and 2-6 for the area covered by each stipulation and Appendix D for a full description of each stipulation.

16. Management actions will conform to VRM Class 2 objectives within the Steele Peak and Santa Margarita Reserve ACECs and VRM Class 3 objectives will apply in other areas except that VRM Class 1 objectives will apply under interim management of the eligible segments of the Santa Margarita River.

**Management Actions**

1. Publish Federal Register notice for vehicle route designations.
2. Publish Federal Register notice for ACEC designations.
3. Prepare ACEC plans.
4. Prepare activity plan for the Poppet Flat SRMA.
5. Prepare activity plans for habitat management as identified in Land Use Allocations No. 4 , 5, and 6.
6. Prepare feasibility reports for land exchanges and acquisitions.
7. Prepare petition for withdrawals identified in Land Use Allocations No. 1 and 3.
8. Develop recreational facilities.
9. Prepare allotment management plan for the Steele Peak allotment.

## **Alternative 4 - Use Opportunities**

### **Resource Condition Objectives**

1. Emphasize providing opportunities for a wide range of recreation uses through provision of facilities and services.
2. Provide viable management and protection of sensitive species habitat.
3. Improve management effectiveness within the management area through disposal of isolated parcels and consolidation of public land ownership, including substantial acquisition within the management area.
5. Allow mineral development and other uses while protecting sensitive resources.
6. Meet the objectives of the Otay Grazing Statement.

### **Land Use Allocations**

1. Designate 1,540 acres at Steele Peak as an Area of Critical Environmental Concern (ACEC) and Research Natural Area (RNA) for the preservation of Stephens' kangaroo rat habitat.
  - Acquire 3,820 acres for addition to the ACEC.
  - The ACEC is unavailable for mineral material sales.
  - The ACEC is a right-of-way avoidance area.
  - The area outside the existing allotment boundary is unavailable for livestock grazing, pending completion of an activity plan. Grazing could be permitted if found compatible with habitat management as determined in the activity plan.
2. Designate three parcels (parcels 107-021, 107-101, 107-121) in upper Santa Ana River wash totalling 760 acres as an ACEC and RNA for the protection of Santa Ana River woolly-star and slender-horned spineflower.
  - The ACEC is unavailable for mineral material sales and livestock grazing and is closed to motorized vehicle use.
  - The ACEC is a right-of-way avoidance area.
3. Designate 1,260 acres within the Santa Margarita Ecological Reserve (including 40 acres within San Diego County) as an ACEC and RNA for the protection for sensitive species and natural values.
  - Acquire 300 acres for addition to the ACEC.
  - The ACEC is unavailable for mineral material sales and livestock grazing.

### **Land Use Allocations, (cont.)**

- The ACEC is a right-of-way avoidance area.
  - A portion of the ACEC, 360 acres in parcels 218-231 and 218-331, is closed to motorized vehicle use.
4. Manage the Badlands area, located east of the city of Riverside, for multi-species values and open space.
- Acquire 1,000 acres of adjacent land to consolidate ownership and improve management.
  - The area is unavailable for livestock grazing, pending completion of an activity plan. Grazing could be permitted if found compatible with habitat management as determined in the activity plan.
5. Manage parcels at Oak Mountain for sensitive plant and wildlife species values.
- Acquire 640 acres for consolidation of sensitive plant habitat.
  - The three parcels in the Oak Mountain vicinity (the 888 acres in parcels 205-321, 205-341 and 220-041) are closed to motorized vehicle use and are unavailable for livestock grazing.
6. Manage public lands in the Poppet Flat area as a special recreation management area (SRMA). The physical, social and managerial settings to be maintained for the SRMA are as follows:
- The area is characterized as a large block of predominantly unmodified land, although in some locations there is moderate evidence of the sights and sounds of man. In some areas resource modification and utilization practices are evident, but harmonize with the natural environment. From the periphery of the area the sights and sounds of man may be readily apparent on adjoining lands.
  - Concentration of users is low in most areas, but is moderate or even high at times in locations with facilities provided for group activities.
  - Facilities are provided for protection of resource values and safety of users. Spacing of groups may be formalized to disperse use and limit contacts between groups. In some locations rustic facilities are provided for user convenience and on-site controls and restrictions offer a sense of security. Opportunities for motorized vehicle use exist. In some locations conventional motorized use is provided for in construction standards and design of facilities.
- The SRMA provides opportunities for equestrian use, hiking, backpacking, camping, picnicking, nature study and hunting.
7. Administer the Canyon Lake area (parcel 176-261) as an SRMA. The physical, social and managerial settings to be maintained for the SRMA are as follows:
- The area, including Canyon Lake reservoir is characterized by a substantially modified natural environment, although sensitive resources are protected.



**Chapter 2 - Alternatives**  
**Riverside-San Bernardino County Management Area**

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**Land Use Allocations, (cont.)**

- Sights and sounds of man are readily evident and the concentration of users is often moderate to high.
  - Facilities are provided for specific activities such as boating and fishing. Developed sites, roads and trails are designed for moderate to high use and for minimizing impacts to sensitive resources.
  - The SRMA provides opportunities for a variety of recreational activities, including boating, water skiing, fishing, jet skiing and picnicking.
8. A total of 7,218 acres of mostly small and isolated parcels are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA (Refer to Glossary for definition of disposal criteria).
- Within this total there are two parcels with a total of 250 acres which are available only if sensitive resources are protected or compensated as a condition of disposal. One parcel (190-321) of 200 acres contains Least Bell's Vireo habitat, and one parcel (208-181) has high potential for the occurrence of slender-horned spineflower.
9. A total of 4,436 acres, consisting of parcels adjacent to the San Bernardino National Forest are available for private exchange but not sale.
10. In addition to the lands identified as available for exchange in Land Use Allocation No. 9, a total of 3,179 acres, are available for disposal by exchange but not sale on the condition that either 1) exchange be used to accomplish Steele Peak acquisitions, or 2) that exchange out of federal ownership not take place until the acquisition goal identified for the Steele Peak Reserve in Land Use Allocation No. 1 is attained.
11. A total of 360 acres (parcel 220-191), which includes all of the Agua Tibia WSA is not available for disposal from federal ownership, but is considered suitable for jurisdictional exchange with the U. S. Forest Service.
12. Vehicle route designations for the 640 acre Canyon Lake parcel (176-261) are shown in Map 2-4. A total of 3,193 acres are closed to motorized vehicle use including the 2,008 acres identified in Land Use Allocations No. 2, 3 and 5 and the areas described below.
- The Agua Tibia WSA (360 acres) is closed to motorized vehicle use for preservation of wilderness values.
  - In addition to the 760 acres described in Land Use Allocation No. 2, a 280-acre parcel (108-081) in the Santa Ana River wash is closed.
  - Parcel 180-111 (545 acres) near the San Jacinto River and Valle Vista is closed to vehicle use to help protect adjacent populations of slender-horned spineflower.

For other public lands, until such time as vehicle route designation takes place, motorized vehicle use will be limited to existing routes of travel.

**Chapter 2 - Alternatives**  
**Riverside-San Bernardino County Management Area**

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**Land Use Allocations, (cont.)**

13. Livestock grazing allocations are the same as described for Alternative. Lands identified as suitable for disposal are closed to grazing applications. Where grazing use currently occurs on such parcels, grazing leases and preferences will be cancelled following two years prior notification. The existing allotments which would be eliminated due to land disposal actions are Diamond Valley and Rawson Valley.
14. Availability of public lands for oil and gas leasing is the same as described for Alternative 1.
15. Management actions will conform to VRM Class 3 objectives, except that Class 1 objectives will apply under interim management of the eligible segments of the Santa Margarita River.

**Management Actions**

1. Publish Federal Register notice for vehicle route designations.
2. Publish Federal Register notice for ACEC designations.
3. Prepare ACEC plans.
4. Prepare activity plans for the Poppet Flat and Canyon Lake SRMAs.
5. Prepare feasibility reports for land exchanges and acquisitions.
6. Develop recreational facilities for the Poppet Flat and Canyon Lake SRMAs.
7. Prepare allotment management plan for the Steele Peak allotment.

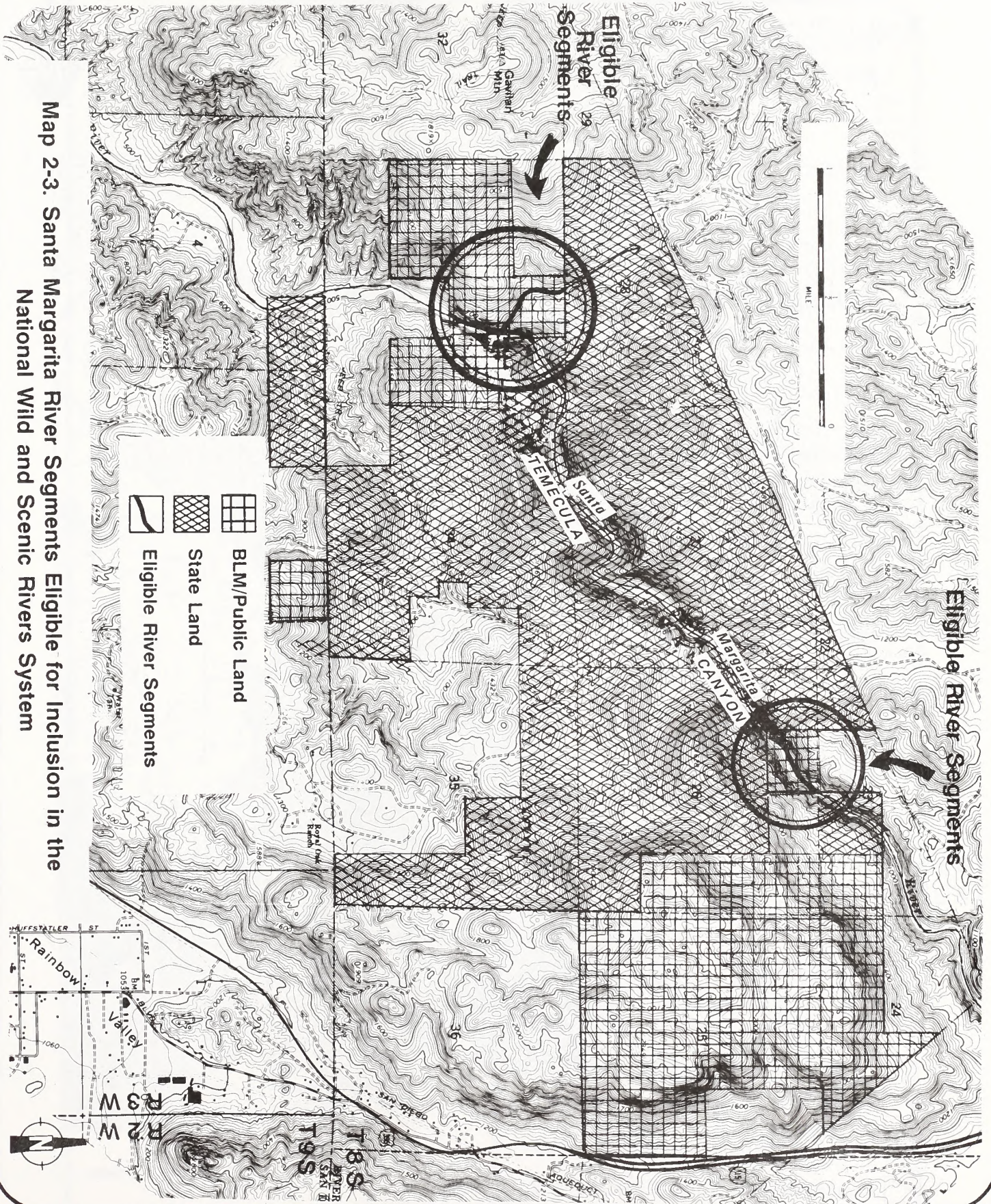
**Rationale for the Preferred Alternative**

**Alternative 3 - Sensitive Species, Open Space and Recreation is the Preferred Alternative.** Most of the public lands within the management area are small and scattered parcels. Many of these parcels, however, have high value, both in their development potential and in their natural resource value as wildlife habitat and open space. Many of the parcels contain habitat for one or more of the sensitive species known to occur within the area.

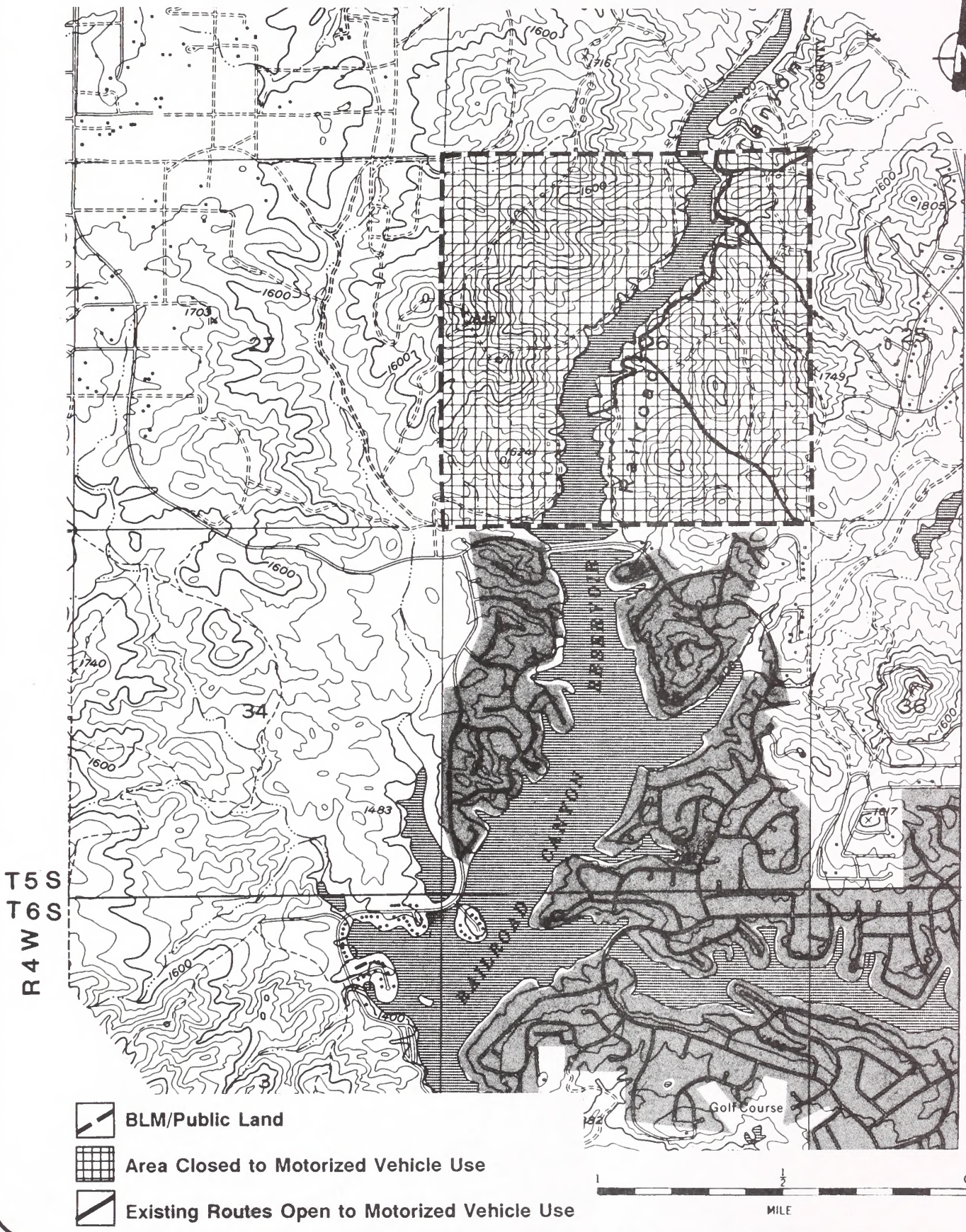
This alternative supports BLM policy in providing special management attention to sensitive habitat areas, including the designation of three ACECs as well as three additional areas for habitat management. Of particular importance at the present time are ongoing cooperative efforts to establish open space reserves for the federally endangered Stephens' kangaroo rat. Participation in these efforts, as provided by this alternative, presents the opportunity to improve management efficiency by greatly reducing the number of scattered parcels through land exchanges to consolidate public land ownership within the Steele Peak ACEC .

Another primary benefit of the preferred alternative is that it provides increased opportunities for recreational use on approximately 8,000 acres, through establishment of the Poppet Flat SRMA.

Map 2-3. Santa Margarita River Segments Eligible for Inclusion in the National Wild and Scenic Rivers System




# Map 2-4. Riverside-San Bernardino County Management Area: Canyon Lake Motorized Vehicle Designations





Riverside-San Bernardino  
County Management Area

Oil and Gas Lease  
Stipulation Areas for  
Slender-horned  
Spineflower, California  
Gnatcatcher, and Stephens'  
Kangaroo Rat.

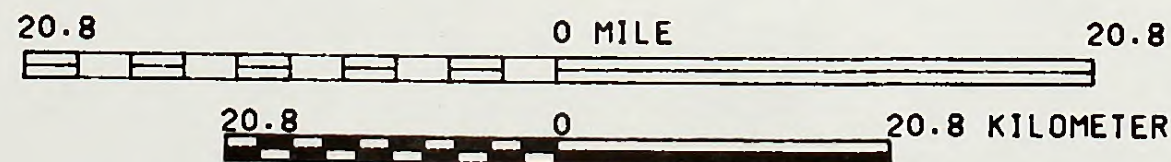
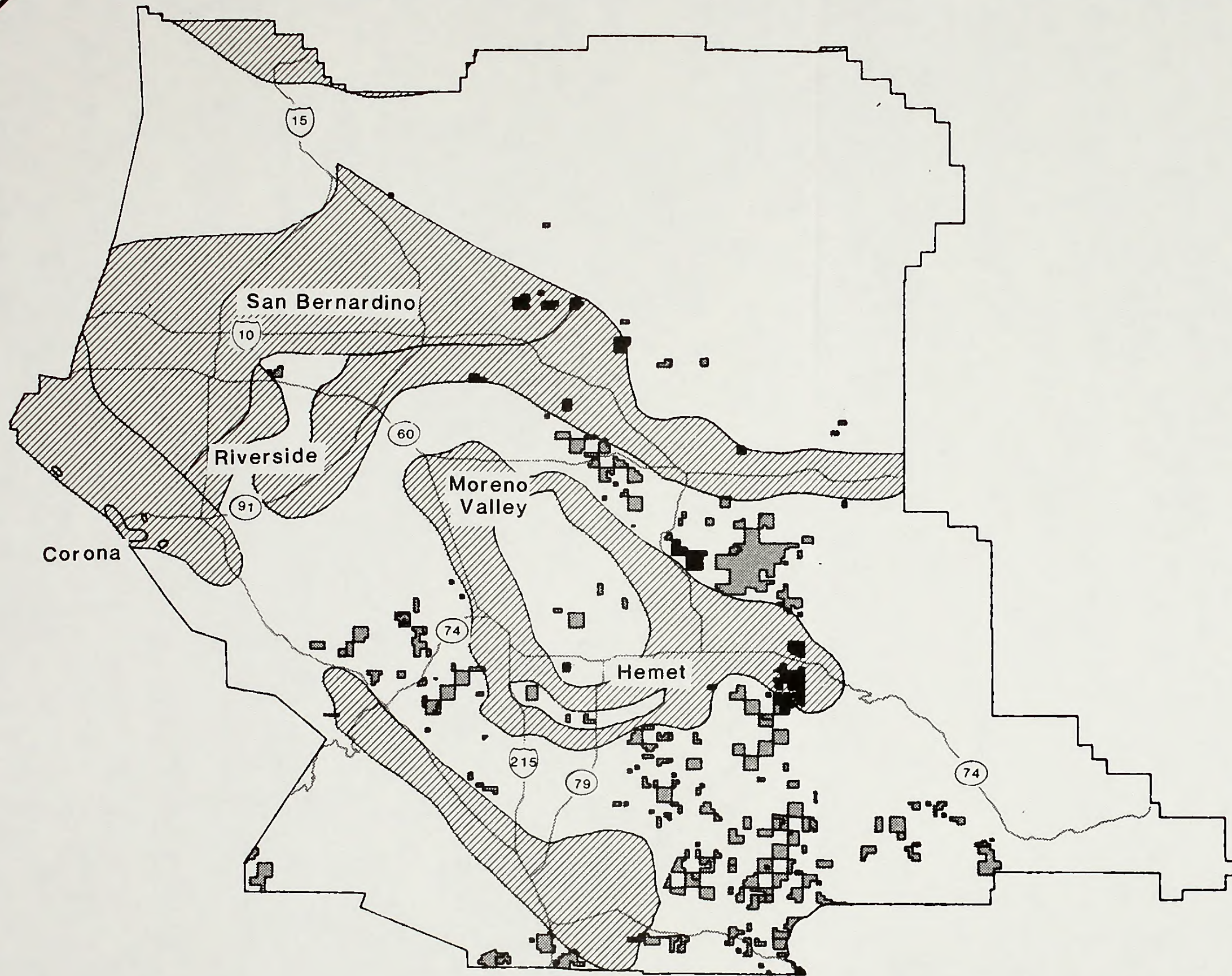
 Areas Having Potential for  
Oil and Gas, California  
Gnatcatcher Habitat, and  
Stephens' Kangaroo Rat  
Habitat.

(California Gnatcatcher and  
Stephens' Kangaroo Rat  
stipulations apply to all BLM  
public lands within these  
areas.)

 Slender-horned  
Spineflower Stipulation  
Areas.

 BLM/Public Lands  
(Including Split - Estate  
Lands).

Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area





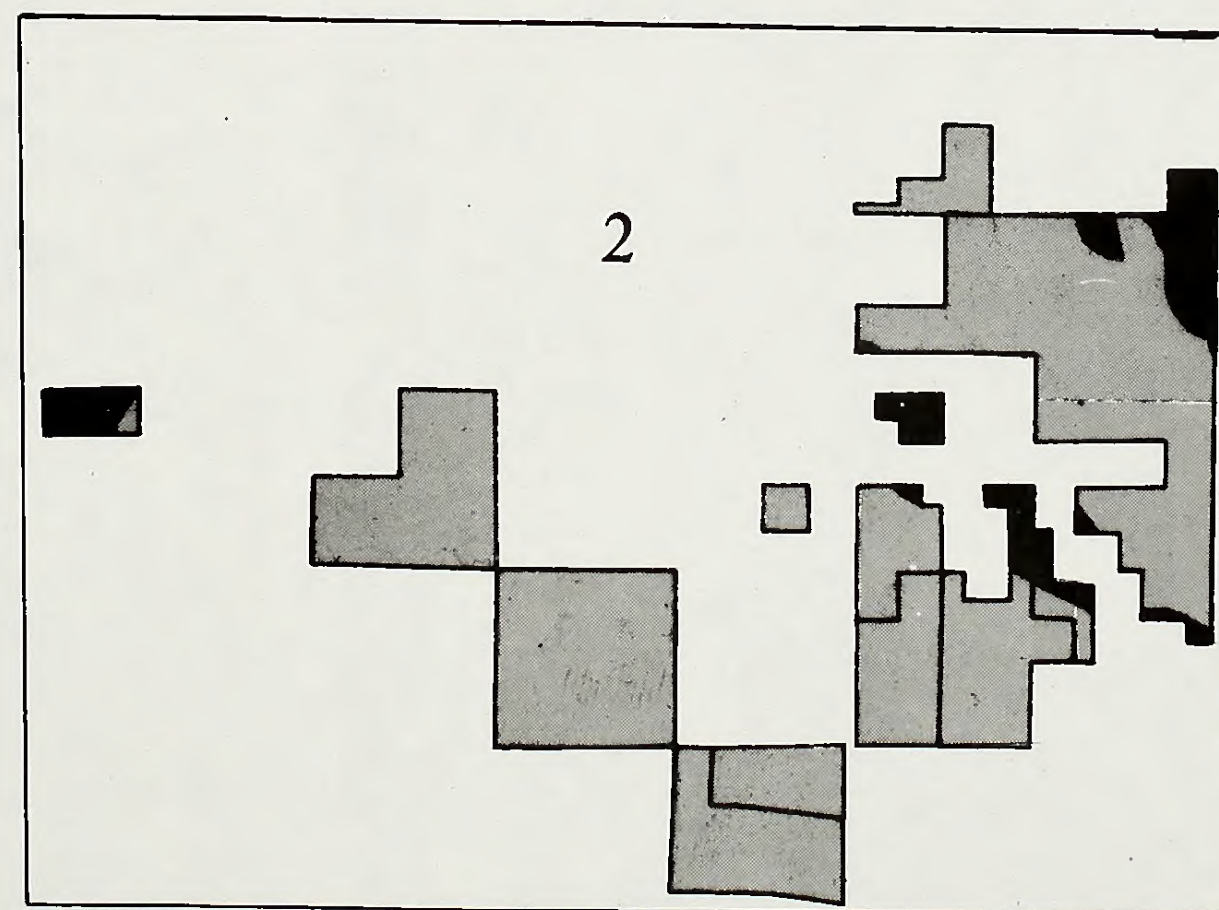
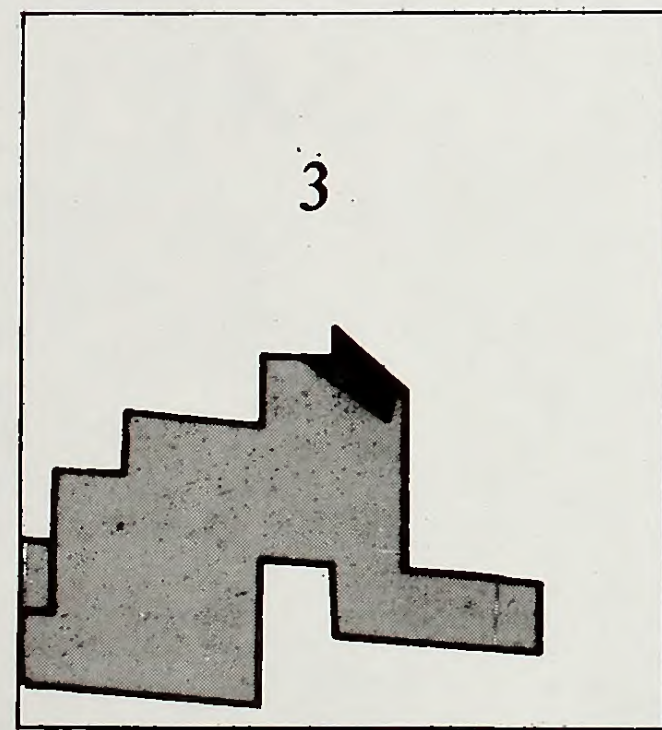
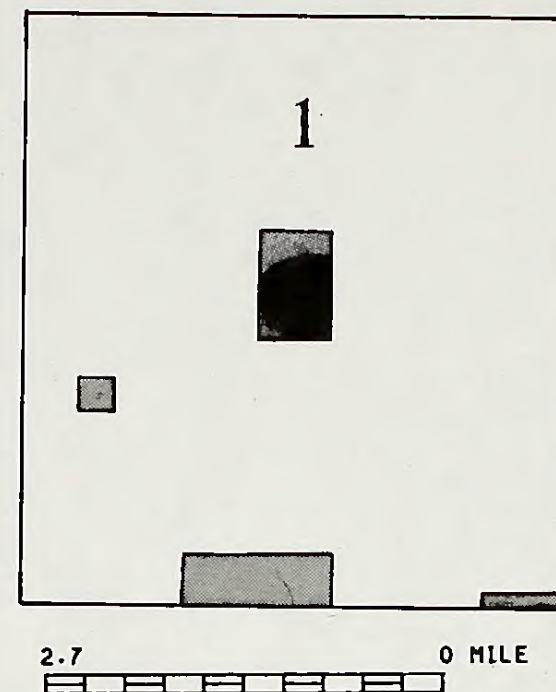
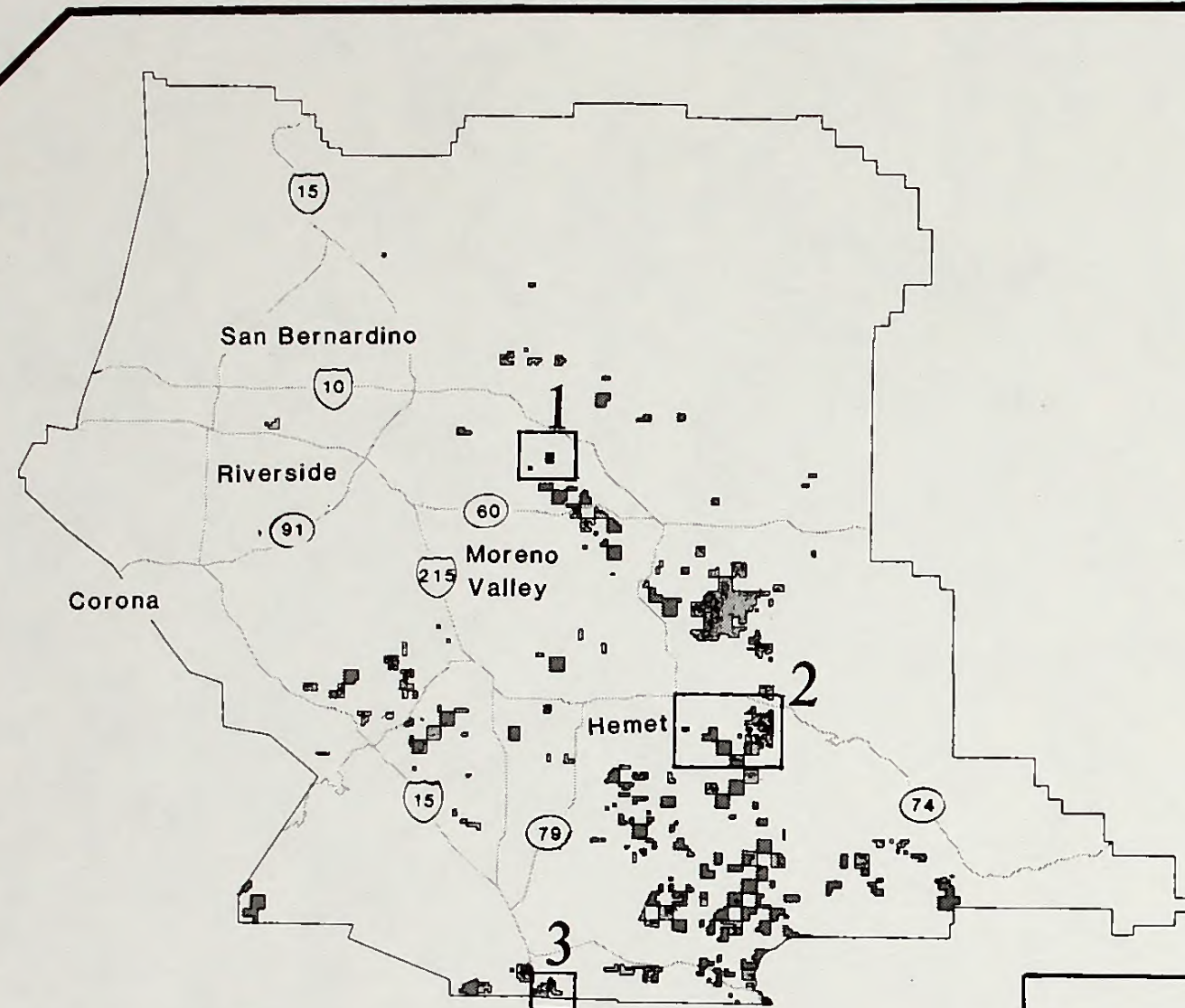
Riverside - San Bernardino  
County Management Area

Oil and Gas Lease  
Stipulation Areas for Least  
Bell's Vireo.

■ Least Bell's Vireo  
Stipulation Areas.

□ BLM/Public Lands  
(Including Split - Estate  
Lands).

Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area







## Beauty Mountain Management Area

### Alternatives

Four alternatives were developed for this management area. They provide decision makers with a range of realistic and distinct options relating to the identified issues: 1. Land tenure adjustment and use authorizations, 2. Threatened, endangered and other sensitive species, 3. Open space, and 4. Recreation and public access.

1. **No Action (Continuation of Present Management).** Maintains existing grazing use. Allows recreation, mineral development and other uses, consistent with policy and management objectives.
2. **Administrative Adjustments.** Maximizes disposal and transfer of public lands. Provides for protection of sensitive resources in all management actions, including disposal and transfer, where provisions for long-term protection are made prior to disposal. Allows recreation, mineral development and other uses, consistent with policy and management objectives.
3. **Sensitive Species, Open Space and Recreation.** Maximizes protection and enhancement of sensitive species and their habitats, wildlife, open space, watershed and other natural values. Directs management to areas with high resource values. Allows compatible recreation and other uses, consistent with policy and sensitive species management objectives.
4. **Use Opportunities.** Provides enhancement of opportunities for intensive recreation use. Directs management to areas with potential for recreation use. Allows other uses consistent with policy and management objectives.

## Alternative 1 - No Action (Continuation of Present Management)

### Resource Condition Objectives

1. Improve management effectiveness through disposal of small and/or isolated parcels and acquisition of inholdings within the Beauty Mountain Wilderness Study Area (WSA).
2. Provide limited opportunities for dispersed recreation use.
3. Meet objectives of the Otay Grazing Statement.

### Land Use Allocations

1. Acquire privately owned inholdings (1,200) acres within the Beauty Mountain WSA.
2. A total of 645 acres of mostly small and isolated parcels are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA (Refer to Glossary for definition of disposal criteria).
3. A total of 9,526 acres, consisting of unconsolidated lands, are available for private exchange but not sale.
4. Public lands are open to dispersed recreation use as part of the South Coast extensive recreation management area. Other than acquisition of public access to the larger parcels, no development of recreational facilities is provided.
5. Until such time as vehicle route designation takes place, motorized vehicle use will be limited to existing routes of travel.
6. Livestock grazing allocations from the Otay Grazing Statement are maintained for existing allotments (see Map 2-7) as follows:
  - Beauty Mountain allotment: 1452 AUMs
  - Rogers Canyon allotment: 102 AUMs
  - Tule Valley allotment: 172 AUMs
  - Cahuilla allotment: 23 AUMs

Lands identified as suitable for disposal are closed to grazing applications. Where grazing use currently occurs on such parcels, grazing leases and preferences will be cancelled following two years prior notification. The existing allotments which would be eliminated due to land disposal actions are Tule Valley and Cahuilla.

7. Management actions will conform to visual resource management VRM Class 3 objectives.

### Management Actions

1. Publish Federal Register notice for vehicle route designations.
2. Prepare Beauty Mountain Allotment Management Plan.
3. Conduct prescribed burning for increased forage production.

**Management Actions, (cont.)**

4. Prepare feasibility reports for land disposal, exchanges and acquisitions.

## **Alternative 2 - Administrative Adjustments**

### **Resource Condition Objectives**

1. Improve management effectiveness through transfer and disposal of lands and provide for consolidation of public land ownership in other management areas.

### **Land Use Allocations**

1. A total of 7,277 acres of small and isolated parcels and larger unconsolidated parcels are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA (Refer to Glossary for definition of disposal criteria).
2. A total of 2,823 acres, consisting of parcels adjacent to the Cleveland National Forest, are not available for sale but are available for private exchange.
3. A total of 18,408 acres of land are not suitable for private exchange or sale, but are considered potentially suitable for jurisdictional exchange with the U. S. Forest Service.
4. Public lands are open to dispersed recreation use as part of the South Coast extensive recreation management area. No development of recreational facilities is provided.
5. Vehicle route designations are the same as in Alternative 1.
6. The livestock grazing allocations are the same as described for Alternative 1. Lands identified as suitable for disposal are closed to grazing applications. Where grazing use currently occurs on such parcels, grazing leases and preferences will be cancelled following two years prior notification. The existing allotments which would be eliminated due to land disposal actions are Tule Valley and Cahuilla.
7. Management actions will conform to VRM Class 3 objectives.

### **Management Actions**

1. Publish Federal Register notice for vehicle route designations.
2. Prepare Beauty Mountain Allotment Management Plan.
3. Contact the U.S. Forest Service concerning the suitability of lands for transfer of jurisdiction and notify local agencies regarding availability of lands identified for disposal.
4. Prepare feasibility reports for land exchanges and disposals.
5. Conduct prescribed burning for increased forage production.

## Alternative 3 - Sensitive Species, Open Space and Recreation (Preferred Alternative)

### Resource Condition Objectives

1. Emphasize protection of sensitive species, open space, watershed and natural values.
2. Improve management effectiveness within the management area through disposal of isolated parcels and consolidation of public land ownership.
3. Enhance habitats for all wildlife species, with emphasis on deer and quail.
4. Provide opportunities for low impact recreation through provision of facilities and services.

### Land Use Allocations

1. Manage public lands within the management area as a wildlife habitat management area (HMA).

To enhance wildlife habitat, conduct vegetation manipulation (prescribed burning), as needed to maintain diversity of vegetation age classes with 20% of vegetation as early seral communities as a means of enhancing wildlife habitat and increasing forage.

2. Manage public lands within the management area as a special recreation management area (SRMA). The physical, social and managerial settings to be maintained for the SRMA are as follows:

- The area is characterized by a large block of land with an unmodified natural environment.

From the periphery of the area, however, the sights and sounds of man may be readily apparent on adjoining lands.

- Concentration of users is low, although there is often evidence of other area users.
- Facilities are provided for protection of resource values and safety of users. Spacing of groups may be formalized to disperse use and limit contacts between groups. Opportunities for motorized vehicle use exist.

The SRMA provides opportunities for equestrian use, hiking, backpacking, camping, picnicking, nature study and hunting.

3. Designate 5,830 acres in the central portion of the management area as the Million Dollar Spring Area of Critical Environmental Concern (ACEC) and Outstanding Natural Area (ONA) for the protection of watershed and sensitive natural values.

- Acquire 510 acres for addition to the ACEC.
- The ACEC is a right-of-way avoidance area and is not available for material sales.

4. Designate 1,150 acres currently leased to the San Diego State University, Systems Ecology Group as an ACEC and Research Natural Area (RNA) for the protection of unique vegetation resources.

## Chapter 2 - Alternatives Beauty Mountain Management Area

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### Land Use Allocations, (cont.)

- The ACEC is not available for mineral material sales or livestock grazing.
  - The ACEC is a right-of-way avoidance area.
5. Acquire 9,141 acres within the area of partially consolidated BLM public land ownership, including the 870 acres identified in Land Use Allocations No. 3 and 4.
  6. A total of 1,992 acres of mostly small and isolated parcels are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA (Refer to Glossary for definition of disposal criteria).
  7. A total of 4,059 acres are available for disposal, but only for land exchange to consolidate public land ownership within the management area, consistent with management objectives. A portion of these lands, 2,262 acres, are within the Beauty Mountain WSA and will only be available for exchange if and when they are released from Wilderness consideration and then only to exchange for acquisition of private lands containing high riparian values that are either within or contiguous to the WSA.
  8. Until such time as vehicle route designation takes place, motorized vehicle use is limited to existing routes of travel.
  9. The livestock grazing allocations are the same as described for Alternative 1. Lands identified as suitable for disposal are closed to grazing applications. Where grazing use currently occurs on such parcels, grazing leases and preferences will be cancelled following two years prior notification. The Cahuilla allotments would be eliminated due to land disposal actions.

In addition, the following standards for livestock grazing are established:

- 50% maximum utilization of perennial grasslands current year's growth.
- 25% maximum utilization of current year's growth of riparian vegetation.
- Minimum residual dry matter (RDM) of 500 lb/acre for all annual grassland areas.
- Prescribed burning for livestock forage production is not allowed in riparian areas and in areas which are identified by the Soil Conservation Service (Knecht, 1971) as unsuitable for type conversion and/or as characterized by soils with high erodibility potential.

Future adjustments will be based on these standards and monitoring.

10. Management actions will conform to VRM Class 2 objectives within ACECs and VRM Class 3 objectives in other areas.

### Management Actions

1. Publish Federal Register notices for ACEC designations.
2. Publish Federal Register notice for vehicle route designations.
3. Prepare a coordinated activity level plan for wildlife habitat, recreation management within the management area and livestock grazing as it pertains to the Beauty Mountain allotment.

**Management Actions, (cont.)**

4. Prepare ACEC plans.
5. Prepare feasibility reports for land exchanges and acquisitions.
6. Conduct prescribed burning for wildlife habitat and range improvement objectives.
7. Establish water source improvements for wildlife habitat and range improvement objectives.
8. Develop recreational facilities.

## Alternative 4 - Use Opportunities

### Resource Condition Objectives

1. Emphasize providing opportunities for a wide range of recreation uses through provision of facilities and services.
2. Improve management effectiveness within the management area through disposal of isolated parcels and consolidation of public land ownership.
3. Meet objectives of the Otay Grazing Statement.

### Land Use Allocations

1. Manage public lands within the management area as a special recreation management area (SRMA). The physical, social and managerial settings to be maintained for the SRMA are as follows:
  - The area is characterized by a large block of land with a predominantly unmodified natural environment, although in some locations there is moderate evidence of the sights and sounds of man. In some areas resource modification and utilization practices are evident, but harmonize with the natural environment. From the periphery of the area the sights and sounds of man may be readily apparent on adjoining lands.
  - Concentration of users is low in most areas, but is moderate or even high at times in locations with facilities provided for group activities.
  - Facilities are provided for protection of resource values and safety of users. Spacing of groups may be formalized to disperse use and limit contacts between groups. In some locations rustic facilities are provided for user convenience and on-site controls and restrictions offer a sense of security.

The SRMA provides opportunities for equestrian use, hiking, backpacking, camping, picnicking, nature study and hunting.

2. Acquire 9,141 acres within the area of partially consolidated public land ownership.
3. A total of 1,992 acres of mostly small and isolated parcels are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA (Refer to Glossary for definition of disposal criteria).
4. A total of 4,059 acres are available for disposal, but only for land exchange to consolidate public land ownership within the management area, consistent with management objectives. A portion of these lands, 2,262 acres, are within the Beauty Mountain WSA and will only be available for exchange if and when they are released from Wilderness consideration and then only to exchange for acquisition of private lands containing high riparian values that are either within or contiguous to the WSA.
5. Until such time as vehicle route designation takes place, motorized vehicle use is limited to existing routes of travel.



### **Land Use Allocations, (cont.)**

6. Livestock grazing allocations are the same as described for Alternative 1. Lands identified as suitable for disposal are closed to grazing applications. Where grazing use currently occurs on such parcels, grazing leases and preferences will be cancelled following two years prior notification. The Cahuilla allotments would be eliminated due to land disposal actions.
7. Management actions will conform to VRM Class 3 objectives.

### **Management Actions**

1. Publish Federal Register notice for vehicle route designations.
2. Prepare a coordinated activity level plan for recreation management within the management area and livestock grazing as it pertains to the Beauty Mountain allotment.
3. Prepare feasibility reports for land exchanges and acquisitions.
4. Conduct prescribed burning for increased forage production.
5. Develop water source range improvements.
6. Develop recreational facilities.

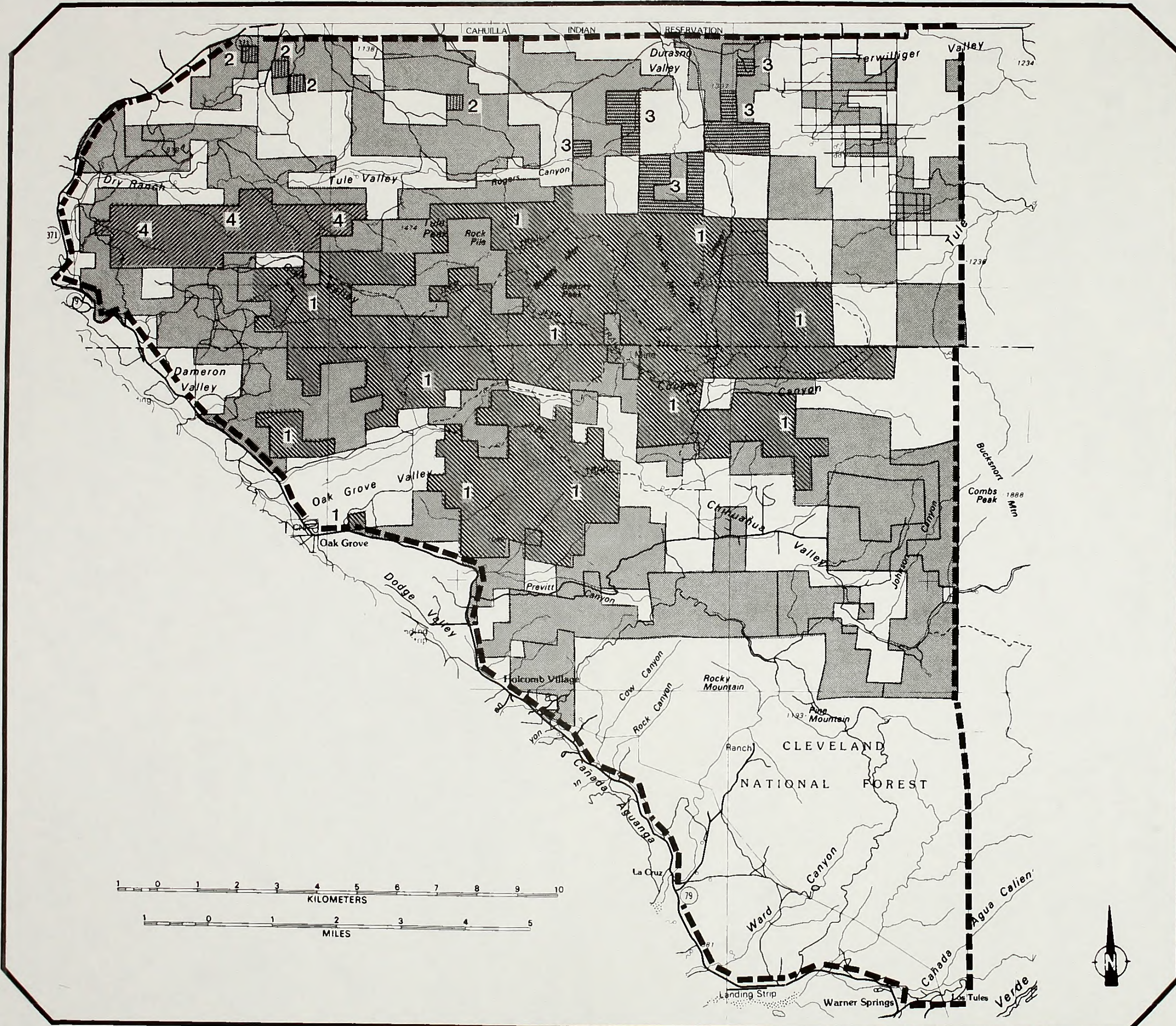
### **Rationale for the Preferred Alternative**

**Alternative 3 - Sensitive Species, Open Space and Recreation** is the **Preferred Alternative**. The BLM-administered public lands within this management area comprise over 28,500 acres of mostly large parcels in a nearly consolidated block, and possess high value as wildlife habitat, open space, range, watershed, and relatively untapped potential for recreation use.

The primary benefit of the preferred alternative is more intensive management of all of the values associated with the public lands. This is provided by identification of the area as both a habitat management area and a special recreational management area. In addition, important watershed values are protected and unique opportunities for study of chaparral vegetation are provided in designation of the Million Dollar Spring and Johnson Canyon Areas of Critical Environmental Concern.

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MAP 2-7




Beauty Mountain Management Area

Livestock Grazing Allotments


 1-Beauty Mountain

 2-Coahuilla

 3-Rogers Canyon

 4-Tule Valley

 Boundary of Management Area

 BLM/Public Lands (Including Split - Estate Lands)

Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area



## Los Angeles-Orange County Management Area

### Alternatives

Three alternatives were developed for this management area. They provide decision makers with a range of realistic and distinct options relating to the identified issues: 1. Land tenure adjustment and use authorizations, 2. Threatened, endangered and other sensitive species, 3. Open space, 4. Recreation and public access, and 5. Minerals.

1. **No Action (Continuation of Present Management).** Maximizes disposal and transfer of public lands. Provides for protection of sensitive species habitat in all management actions, including disposal and transfer. Allows recreation, mineral development and other uses, consistent with policy and management objectives. The No Action Alternative is equivalent to the Administrative Adjustments Alternative as developed in the other three management areas. Therefore, a separate Administrative Adjustments Alternative was not developed for this management area.
3. **Sensitive Species, Open Space and Recreation.** Maximizes protection and enhancement of sensitive species and their habitats. Directs management to areas with sensitive species management potential. Allows compatible recreation, mineral development and other uses, consistent with policy and sensitive species management objectives.
4. **Use Opportunities.** Provides enhancement of opportunities for production of mineral material resources. Directs management to areas with development potential. Allows other uses, consistent with policy and management objectives.

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## **Alternative 1 - No Action (Continuation of Present Management) (Preferred Alternative)**

### **Resource Condition Objectives**

1. Improve management effectiveness through transfer and disposal of lands in this management area and provide for consolidation of public land ownership in other management areas.
2. Allow oil and gas leasing while providing protection of sensitive resources.

### **Land Use Allocations**

1. A total of 3,711 acres of mostly small and isolated parcels are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA (Refer to Glossary for definition of disposal criteria). Of this total there are 5 parcels with 686 acres near Castaic Lake which are under Recreation and Public Purposes Act (R&PP) application by the State of California Department of Water Resources. Conveyance under the R&PP Act will be preferred over sale on these lands.
2. A total of 1,216 acres, not available for disposal from federal ownership, are considered suitable for jurisdictional exchange with the U. S. Forest Service.
3. All public lands are open to oil and gas leasing. The following stipulations are applied to new oil and gas leases for protection of federally listed species.

#### No Surface Occupancy (NSO):

- Slender-horned spineflower
- Least Bell's Vireo

#### Controlled Surface Use (CSU):

- Unarmored three-spined stickleback

See Maps 2-8 and 2-9 for the area covered by each stipulation and Appendix D for a full description of the each stipulation.

4. Until such time as vehicle route designation takes place, motorized vehicle use will be limited to existing routes of travel.
5. The livestock grazing allocation from the Otay Grazing Statement for the Quail Valley allotment is maintained at 16 animal unit months.

Lands identified as suitable for disposal are closed to grazing applications. One such parcel is the existing Quail Valley allotment. The existing grazing lease and preferences on this allotment will be cancelled following two years prior notification.

6. Management actions will conform to visual resource management (VRM) Class 3 objectives

### **Management Actions**

1. Publish Federal Register notice for vehicle route designations.

**Management Actions, (cont.)**

2. Contact the U.S. Forest Service concerning the suitability of lands for transfer of jurisdiction and notify local agencies regarding availability of lands identified for disposal.
3. Prepare exchange feasibility and land reports for land exchanges and disposal.

## Alternative 3 - Sensitive Species, Open Space and Recreation

### Resource Condition Objectives

1. Emphasize protection and enhancement of sensitive species habitat and open space values.
2. Improve management effectiveness within the management area through disposal of isolated parcels and consolidation of public land ownership.
3. Maintain recreational opportunities relating to use of the Pacific Crest National Scenic Trail (PCT) and dispersed use of adjacent lands.

### Land Use Allocations

1. Manage lands (to be acquired) in the Santa Clara River corridor as a habitat management area (HMA) for unarmored three-spined stickleback and southwestern pond turtle as the priority species.
  - Acquire up to 6,000 acres of habitat for unarmored three-spined stickleback and southwestern pond turtle.
2. Manage two parcels containing the PCT (976 acres) for related recreation use as part of the South Coast extensive recreation management area.
3. A total of 3,711 acres of mostly small and isolated parcels are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA (Refer to Glossary for definition of disposal criteria). Of this total there are 5 parcels with 686 acres near Castaic Lake which are under Recreation and Public Purposes Act application by the State of California Department of Water Resources. Conveyance under the R&PP Act will be preferred over sale on these lands.
4. One 240-acre parcel is not available for disposal from federal ownership, but is considered suitable for jurisdictional exchange with the U. S. Forest Service.
5. All public lands are open to oil and gas leasing. The following stipulations are applied to new oil and gas leases for protection of federally listed species.

#### No Surface Occupancy (NSO):

- Slender-horned spinneflower
- Least Bell's Vireo
- Unarmored three-spined stickleback

#### Controlled Surface Use (CSU):

- Unarmored three-spined stickleback

See Maps 2-8 and 2-9 for the area covered by the stipulations (the unarmored three-spined stickleback NSO stipulation would apply to the lands acquired as identified in Land Use Allocation No. 1) and Appendix D for a full description of the each stipulation.



### Land Use Allocations, (cont.)

6. The livestock grazing allocation from the Otay Grazing Statement for the Quail Valley allotment is maintained at 16 AUMs.

Lands identified as suitable for disposal are closed to grazing applications. One such parcel is the existing Quail Valley allotment. The existing grazing lease and preferences on this allotment will be cancelled following two years prior notification.

7. Until such time as vehicle route designation takes place, motorized vehicle use will be limited to existing routes of travel.
8. Management actions will conform to VRM Class 2 objectives

### Management Actions

1. Publish Federal Register notice for vehicle route designations.
2. Prepare exchange/acquisition feasibility report for identified land acquisitions.
3. Prepare habitat management plan for Santa Clara River corridor lands (after acquisition).
4. Contact the U.S. Forest Service concerning the suitability of lands for transfer of jurisdiction.

## Alternative 4 - Use Opportunities

### Resource Condition Objectives

1. Enhance opportunities for mineral material production.
2. Improve management effectiveness through disposal actions within this management area and consolidation of public land ownership within other management areas.
3. Allow oil and gas development while providing protection of sensitive resources.

### Land Use Allocations

1. Acquire surface ownership and access to the following 1,000 acres of high mineral material value split-estate lands to facilitate management for mineral material development.

T. 4 N., R. 14 W., SBM

Section 2: SW1/4

Section 3: S1/2SE1/4

Section 9: SE1/4NE1/4, SE1/4, E1/2SW1/4, SW1/4SW1/4

Section 10: NE1/4, N1/2S1/2

Section 16: N1/2NW1/4, NW1/4NE1/4

2. Mineral interests of a portion of the lands within the acquisition area identified in Land Use Allocation No. 1 are available for exchange: but only for the purpose of acquiring surface ownership over other portions.
3. A total of 3,711 acres of mostly small and isolated parcels are available for exchange and also meet the disposal criteria of suitability for sale as set forth in Sec. 203 (a) (1) of FLPMA (Refer to Glossary for definition of disposal criteria). Of this total there are 5 parcels with 686 acres near Castaic Lake which are under Recreation and Public Purposes Act application by the State of California Department of Water Resources; conveyance under the R&PP Act will be preferred over sale or exchange of these lands.
4. A total of 1,216 acres, not available for disposal from federal ownership, are considered suitable for jurisdictional exchange with the U.S. Forest Service.
5. Availability of public lands to oil and gas leasing is the same as described for Alternative 1.
6. Until such time as vehicle route designation takes place, motorized vehicle use will be limited to existing routes of travel.
7. The livestock grazing allocation from the Otay Grazing Statement for the Quail Valley allotment is maintained at 16 AUMs.

Lands identified as suitable for disposal are closed to grazing applications. One such parcel is the existing Quail Valley allotment. The existing grazing lease and preferences on this allotment will be cancelled following two years prior notification.

8. Management actions will conform to VRM Class 3 objectives.

## Management Actions

1. Publish Federal Register notice for vehicle route designations.
2. Contact the U.S. Forest Service concerning the suitability of lands for transfer of jurisdiction and notify local agencies regarding availability of lands identified for disposal.
3. Prepare exchange feasibility and land reports for land exchanges and disposal.
4. Contact Los Angeles County regarding acquisition identified in land use allocation No. 1 above in order to maintain coordination with regard to the permitting of land uses which could preclude sand and gravel production.
5. Conduct competitive mineral material sales.

## Rationale for the Preferred Alternative

**Alternative 1 - No Action is the Preferred Alternative.** This alternative provides for continuation of current management direction which is primarily oriented toward disposal and transfer of the public surface lands and minerals management of the 42,000 acres of BLM-administered mineral estate. Some of these lands have potential for mineral resources such as oil and gas and/or sand and gravel. Over the last ten years disposal actions have reduced public surface acreage from approximately 11,500 to the current 5,613. Of these remaining lands, 1,216 acres are considered suitable for jurisdictional exchange with the U.S. Forest Service and 686 acres near Castaic Lake are under application for conveyance to the State of California Department of Water Resources under the Recreation and Public Purposes (R&PP) Act. If these actions are consummated, only 50 scattered parcels would remain with an average size of less than 80 acres. Because of their size, location, surrounding lands uses and lack of legal access, these parcels are difficult to manage. Feasible opportunities to consolidate public land ownership appear to be limited.

The emphasis of this alternative is to enhance management effectiveness through land disposal and transfer actions and to provide for consolidation of public land ownership in other management areas. In addition to surface land ownership considerations, this alternative provides continued management of the federal mineral estate lands. Under the preferred alternative these lands would remain open to oil and gas leasing and mineral material sale.

PROFESSOR OF CHEMISTRY

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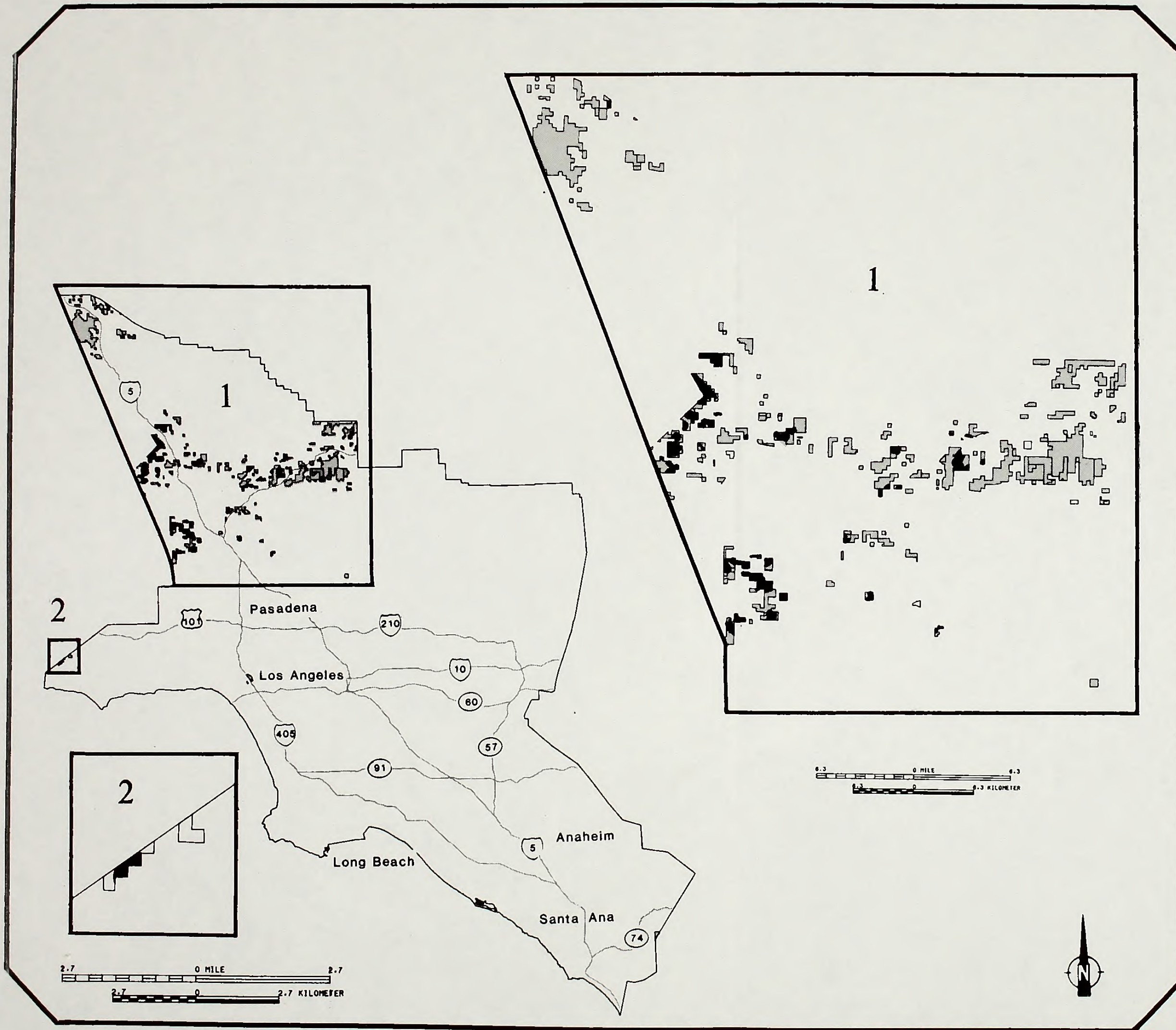
Los Angeles-Orange  
County Management Area

Oil and Gas Lease  
Stipulation Areas for Least  
Bell's Vireo.

■ Least Bell's Vireo  
Stipulation Areas.

□ BLM/Public Lands  
(Including Split Estate  
Lands)

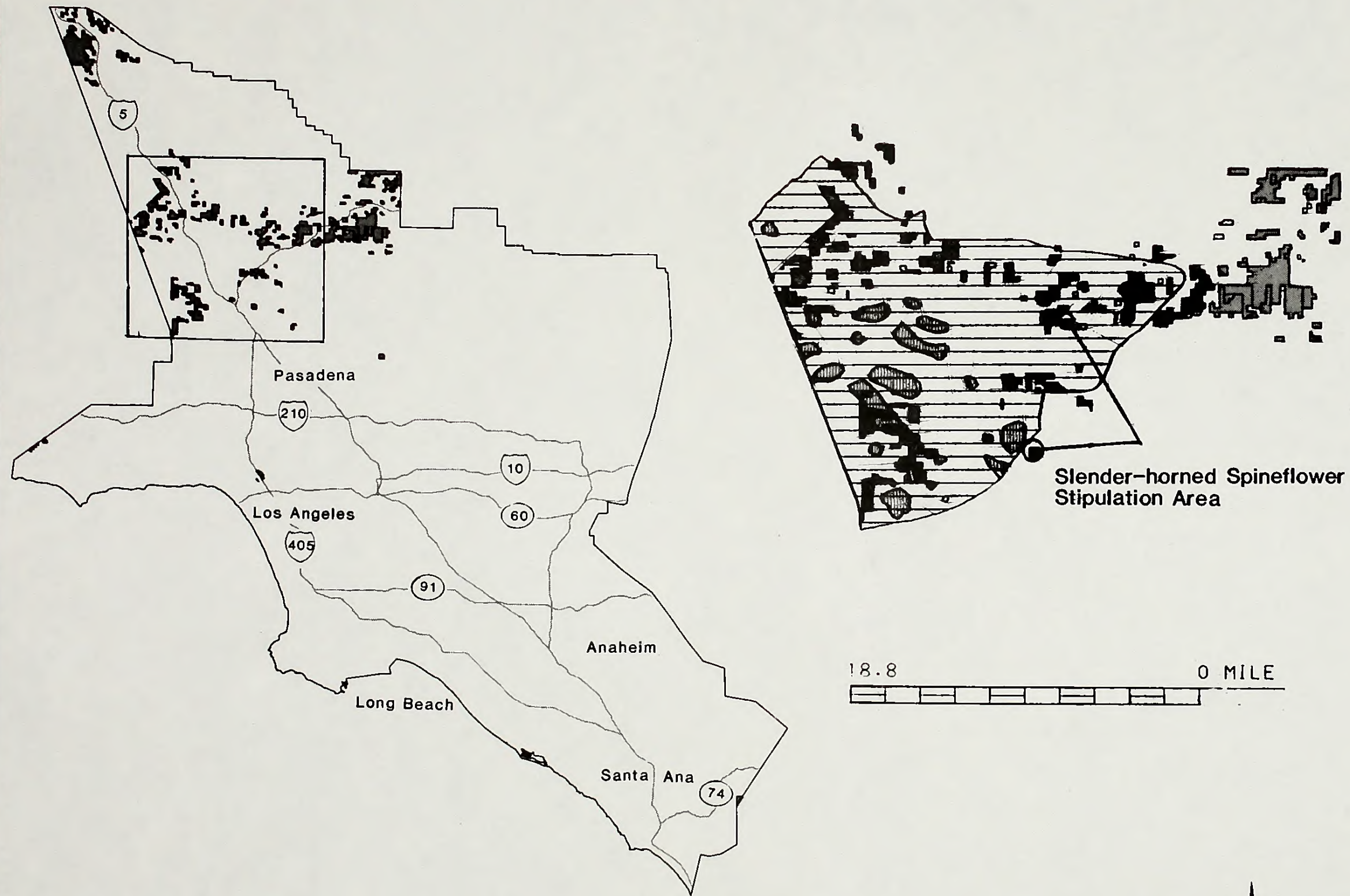
Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area








Los Angeles-Orange  
County Management Area


Oil and Gas Lease  
Stipulation Areas for  
Slender-horned Spineflower  
and Unarmored Three-  
spined Stickleback.



 Areas Having Potential for Oil and Gas, and Occurring Within a Zone of Potential Influence on Unarmored Three-spined Stickleback Habitat.  
(The controlled surface use stipulation for Unarmored Three-spined Stickleback applies to all BLM public lands within these areas.)

 Slender-horned Spineflower Stipulation Area. (Parcels are circled)

 Existing Oil Fields

 BLM/Public Lands (Including Split - Estate Lands)

Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area





**Table 2-1. Summary of Alternative Impacts for the San Diego County Management Area**

Environmental Topic	Alternative 1 No Action (Continuation of Present Management)	Alternative 2 Administrative Adjustments	Alternative 3 (Preferred) Sensitive Species Open Space and Recreation	Alternative 4 Use Opportunities
Impacts to Wildlife	<p>Development following disposal or R&amp;PP lease of public land would have slightly negative impacts on southwestern pond turtle, orange-throated whiptail, and California Gnatcatcher habitat and/or populations. Development following land disposal would have moderately negative impacts on deer and quail habitat and populations and would also have negative but not significant impacts on coastal sage scrub habitat and slightly negative impacts on riparian habitats.</p>	<p>Development following disposal or R&amp;PP lease of lands would have moderately negative impacts on southwestern pond turtle, orange-throated whiptail, and California Gnatcatcher populations and/or habitat. Land disposal would have slightly negative impacts on riparian habitats, moderately negative impacts on deer and quail habitat and populations, and highly negative impacts on coastal sage scrub relative to habitat on BLM lands within the management area.</p>	<p>Land acquisitions would have positive impacts on Least Bell's Vireo, Southwestern pond turtle, orange-throated whiptail, and California Gnatcatcher populations and habitat.</p> <p>Land acquisitions and vegetation management would have moderately positive impacts on deer and quail habitat and populations, and slightly positive impacts on coastal sage scrub and riparian habitats.</p>	<p>Impacts to southwestern pond turtle, orange-throated whiptail, and California Gnatcatcher would be the same as for Alternative 1.</p> <p>Impacts to deer and quail would be the same as for Alternative 3.</p> <p>Land disposal would have slightly negative impacts on coastal sage scrub and riparian habitats.</p>
Impacts to Vegetation	<p>Development following land disposal would negatively impact populations of Gander's pitcher sage, San Diego barrel cactus, San Diego currant, Tecate cypress, Tecate tarplant and variegated dudleya as well as potential habitat for San Diego thornmint.</p> <p>Land disposal would also impact the Coastal and Valley Freshwater Marsh, South Coast Live Oak Riparian Forest, Southern Interior Cypress Forest, and Southern Willow Scrub communities.</p>	<p>Development following land disposal would have negative impacts on populations of the same species as Alternative 1 as well as on potential habitat for San Diego thornmint and Jacumba locoweed.</p> <p>Development following land disposal would also negatively affect the same plant communities as Alternative 1, as well as the Southern Sycamore Alder Riparian woodland and Southern Cottonwood Willow Riparian Forest communities.</p>	<p>Land acquisitions and management under ACEC designations would have positive impacts on populations of Mexican flannel bush and Tecate cypress, and the following communities: South Coast Live Oak Riparian Forest, Southern Interior Cypress Forest, Southern Sycamore, Alder Riparian Forest, and Southern Willow Scrub.</p>	<p>Land acquisitions and management under ACEC designations would have positive impacts on populations of Mexican flannel bush and Southern Willow Scrub community.</p> <p>Prescribed burning for livestock grazing would have negative impacts impact on populations of Tecate cypress and the Southern Interior Cypress Forest community.</p>

**Table 2-1. Summary of Alternative Impacts for the San Diego County Management Area, (cont.)**

Environmental Topic	Alternative 1 No Action (Continuation of Present Management)	Alternative 2 Administrative Adjustments	Alternative 3 (Preferred) Sensitive Species Open Space and Recreation	Alternative 4 Use Opportunities
Impacts to Open Space Values	Open space values would be conserved on 51,310 acres to be retained in public ownership, of which 89% is rated high or medium in open space value, although there would be localized impacts from activities such as mineral development. Negative impacts would result primarily from disposal and subsequent development of 13,388 acres of which 59% is rated high or medium in open space value.	Open space values would be conserved on 44,146 acres to be retained in public ownership, of which 93% is rated high or medium in open space value, although there would be localized impacts from activities such as mineral development. Negative impacts would result primarily from disposal and subsequent development of 20,552 acres of which 63% is rated high or medium in open space value.	Open space values would be conserved on 62,078 acres to be retained in public ownership, of which 84% is rated high or medium in open space value. Overall, land acquisitions would help maintain open space. Development following exchange/disposal of 2,612 acres (64% rated high or medium in open space value), however, would have negative impacts in local areas.	Open space values would be conserved on 60,078 acres to be retained in public ownership, of which 85% is rated high or medium in open space value. Overall, land acquisitions would help maintain open space. Development following exchange/disposal of 3,892 acres (48% rated high or medium in open space value), however, would have negative impacts in local areas.
Impacts to Recreation Use	Land disposal and lack of providing facilities would result in the public lands not meeting a significant share of projected regional recreational use demands. Disposal of approximately 21% of the land base would result in a reduction of vehicle routes from 105 to 78 miles and overall displacement of recreation use. This would result in an overall reduction in regional recreation opportunities and quality. Use is expected to increase from 13,000 to 20,000 VUD annually following disposal actions, as population growth and urban development occur. However, this use would be concentrated on the lands remaining after disposal.	Land disposal actions would have similar impacts as described for Alternative 1, except greater since disposal of approximately 32% of the land base would occur with a reduction in existing vehicle routes from 105 to 64 miles. Recreational use levels would increase from 13,000 to 16,000 VUD annually following disposal actions, as population growth and urban development occur, but would be concentrated on the lands remaining after disposal.	Management of the Border Mountains SRMA, acquisition of lands and access and provision of recreational facilities would far outweigh the impacts of disposing 4% of the land base. As a result use would increase from 13,000 to 86,000 VUD annually by the year 2000.	Management of the Border Mountains SRMA, acquisition of lands and access and provision of recreational facilities would far outweigh the impacts of disposing 6% of the land base. Overall use would increase from 13,000 to 116,000 VUD annually by the year 2000.

**Table 2-1. Summary of Alternative Impacts for the San Diego County Management Area, (cont.)**

Environmental Topic	Alternative 1 No Action (Continuation of Present Management)	Alternative 2 Administrative Adjustments	Alternative 3 (Preferred) Sensitive Species Open Space and Recreation	Alternative 4 Use Opportunities
Impacts to Mineral Development	Disposal of surface lands and subsequent development for uses not compatible with mineral development would have negative impacts on exploration and possible future development. Included in disposal actions would be 237 acres of high potential for sand and gravel, 1,600 acres with high or moderate potential for gemstone or dimension stone and 329 acres with high or moderate potential for gold.	Impacts from land disposal and subsequent development for uses incompatible with mineral development would be similar to those of Alternative 1. Included in the disposal actions would be 330 acres rated high in potential for sand and gravel, and 543 acres rated high in potential for gemstone or dimension stone.	Closure of two ACECs to mineral material sales would have minor negative impacts to exploration and development. Neither are high in sand and gravel potential.  Disposal of lands and subsequent development for uses not compatible with mineral development would include 184 acres with high potential for sand and gravel, 1,815 acres with high potential for gemstone or dimension stone and 518 acres with high potential for gold.	Closure of two ACECs to mineral material sales would have the same impacts as described for Alternative 3.  Disposal of lands and subsequent development for uses not compatible with mineral development would include 237 acres with high potential for sand and gravel, 1,600 acres with high potential for gemstone or dimension stone and 329 acres with high potential for gold.
Impacts to Kuchamaa (Native American Values)	Disposal and subsequent development of the Little Tecate Peak parcel would have a negative impact on Native American religious values.	Disposal and subsequent development of Kuchamaa and Little Tecate Peak would have a significant negative impact on Native American religious values.	The management prescriptions for the Kuchamaa ACEC, including land acquisition, the avoidance of future rights-of-way and possible relocation or removal of existing right-of-way facilities would protect the Native American religious values and the natural state of Little Tecate Peak and Kuchamaa.	Disposal and subsequent development of the Little Tecate Peak parcel would negatively affect Native American religious values. Kuchamaa (Tecate Peak) would be protected by management under ACEC designation as in Alternative 3.

**Table 2-2. Summary of Alternative Impacts for the Riverside-San Bernardino County Management Area**

Environmental Topic	Alternative 1 No Action (Continuation of Present Management)	Alternative 2 Administrative Adjustments	Alternative 3 (Preferred) Sensitive Species Open Space and Recreation	Alternative 4 Use Opportunities
Impacts to Wildlife	<p>Consolidation of habitat at Steele Peak would have a slightly positive impact on Stephens' kangaroo rat habitat and populations.</p> <p>Development following lands disposal and/or mineral development would have highly negative impacts on habitat and populations of the Wright's checkerspot butterfly, and moderately negative impacts on habitat and populations of orange-throated whiptail and California Gnatcatcher. They would also have slightly negative impacts on deer and quail habitat, and moderately negative impacts on riparian habitats.</p>	<p>Development following disposal of lands and lack of BLM involvement in land consolidation for establishing reserves would ultimately have a significant negative impact on Stephens' kangaroo rat populations.</p> <p>Development following land disposal would have significant negative impacts on Wright's checkerspot butterfly, highly negative impacts on California Gnatcatcher habitat and deer populations and negative but not significant impacts to Least Bell's Vireo, orange-throated whiptail, southwestern pond turtle, quail, and on coastal sage scrub and riparian habitats.</p>	<p>Acquisition of habitat, and management under ACEC designation would have a highly positive impact on Stephens' kangaroo rat habitat and populations. Land acquisitions would have positive impacts on least Bell's Vireo, California Gnatcatcher, and orange-throated whiptail habitats and populations. They would also have significantly high positive impacts on habitat and populations of the Wright's checker-spot butterfly, and high positive impacts on deer, southwestern pond turtle, quail and coastal sage scrub relative to habitat on BLM lands within the management area.</p>	<p>Impacts on Stephens' kangaroo rat would be the same as for Alternative 1.</p> <p>Impacts to other species and habitats would be similar to Alternative 3</p> <p>Land consolidation would have moderately positive impacts on Coastal Sage Scrub habitats.</p>
Impacts to Vegetation	<p>Development following land disposal would negatively impact populations of Palmer's grapplinghook and Parry's tetracoccus, as well as potential habitat for California Orcutt grass, Many-stemmed dudleya, Munz's onion and Nevin's barberry. They would also impact South Coast Live Oak Riparian Forest and Southern Willow Scrub communities.</p>	<p>Development following lands land disposal would negatively impact populations of the same species as well as potential habitat for the species identified in Alternative 1, plus potential habitat for Cleveland goldenstars. Land disposal would also impact some communities as Alternative 1.</p>	<p>Land acquisitions and management under ACEC designation would have positive impacts on populations of Santa Ana River woolly-star, slender-horned spineflower, Nevin's barberry, Payson, jewelflower, and Palmer's grapplinghook as well as on potential habitat for Munz's onion. They also would have positive impacts on South Coast Live Oak Riparian Forest and Southern Willow Scrub communities.</p> <p>Land disposal would negatively impact potential habitat for California Orcutt grass and many-stemmed dudleya.</p>	<p>Management under ACEC designation would have positive impacts on populations of Santa Ana River woolly-star and slender-horned spineflower.</p> <p>Land acquisitions would have positive impacts on Nevin's barberry, Payson, jewelflower, and Palmer's grapplinghook as well as on potential habitat for Munz's onion.</p> <p>Development following lands disposal and exchanges would impact potential habitat for many-stemmed dudleya and Munz's onion.</p>

**Table 2-2. Summary of Alternative Impacts for the Riverside-San Bernardino County Management Area, (cont.)**

Environmental Topic	Alternative 1 No Action (Continuation of Present Management)	Alternative 2 Administrative Adjustments	Alternative 3 (Preferred) Sensitive Species Open Space and Recreation	Alternative 4 Use Opportunities
Impacts to Open Space Values	Open space values would be conserved on lands retained in public ownership and those lands available for Stephens' kangaroo rat conditioned exchange which eventually would be within reserves (a total of 21,454 acres of which 81% is rated high or medium in open space value), although there would be localized impacts from activities such as mineral development. Negative impacts would result primarily from disposal and subsequent development of 8,188 acres of which 50% is rated high or medium in open space value.	Open space values would be conserved on the 13,381 acres to be retained in public ownership or available only for protective disposal, although there would be localized impacts from activities such as mineral development. Negative impacts would result primarily from disposal and subsequent development of 16,262 acres (56% of the total BLM public land) of which 59% is rated high or medium in open space value.	Open space values would be conserved on lands retained in public ownership and those lands available for Stephens' kangaroo rat conditioned exchange which eventually would be within reserves (a total of 22,402) of which 81% is rated high or medium in open space value). Overall, land acquisitions would greatly help maintain open space. Development following exchange/disposal of 7,240 acres (35% rated high or medium in open space value), however, would have negative impacts in local areas.	Open space values would be conserved on lands retained in public ownership and those lands available for Stephens' kangaroo rat conditioned exchange which eventually would be within reserves (a total of 17,989) of which 89% is rated high or medium in open space value). Overall, land acquisitions would help maintain open space. Development following exchange/disposal of 11,654 acres (46% rated high or medium in open space value), however, would have negative impacts in local areas.
Impacts to Recreation Use	Land disposal actions would have negative impacts, as the land base available to recreation users is reduced. A total of 28% of the land base would be eliminated, reducing vehicle routes from 108 to 78 miles and displacing use to other lands. Overall, use is expected to increase from 15,000 VUD annually to 23,000 by 2000, however, due to regional growth, but would be concentrated on the lands remaining after disposal.	Land disposal actions would have similar impacts as described for Alternative 1, except greater, since 56% of the lands base would be disposed. This would reduce existing vehicle routes from 108 to 35 miles and displace use to other areas. Overall, use levels would continue at 15,000 VUD annually, but would be concentrated on the lands remaining after disposal.	Management of the Poppet Flat SRMA, land acquisitions and recreational development would outweigh land disposal and result in greatly increased recreational opportunities. Use would be expected to increase from 15,000 VUD annually to 44,000 by the year 2000.	Management of the Poppet Flat and Canyon Lake SRMAs, land acquisitions and recreational development would outweigh land disposal and result in greatly increased recreational opportunities. Use would be expected to increase from 15,000 VUD annually to 72,000 by the year 2000.

**Table 2-2. Summary of Alternative Impacts for the Riverside-San Bernardino County Management Area, (cont.)**

Environmental Topic	Alternative 1 No Action (Continuation of Present Management)	Alternative 2 Administrative Adjustments	Alternative 3 (Preferred) Sensitive Species Open Space and Recreation	Alternative 4 Use Opportunities
Impacts to Mineral Development	<p>Disposal of surface lands and subsequent development for uses not compatible with mineral development would have negative impacts on exploration and possible future development. Included in disposal actions would be 1,433 acres rated high in potential for sand and gravel.</p> <p>Oil and gas leasing stipulations would complicate and increase the cost of exploratory efforts.</p>	<p>Impacts from land disposal and subsequent development for incompatible uses would be similar to those described for Alternative 1. Included in disposal actions would be 4,832 acres rated high in potential for sand and gravel.</p> <p>Impacts from oil and gas leasing stipulations would be the same as those described for Alternative 1.</p>	<p>Mineral exploration and development would be negatively impacted by the withdrawal of 2,800 acres in the Steele Peak and Santa Margarita ACECs and closure of the 760 acre Santa Ana River Wash ACEC to material sales. The 2,020 acres within the Santa Margarita and Santa Ana River Wash ACECs are rated high in potential for sand and gravel, and the 1,540 acres in the Steel Peak ACEC is rated high in potential for gold.</p> <p>The impacts of surface land disposal actions and oil and gas leasing stipulations would be similar those of Alternative 1. Included in disposal actions would be 4,832 acres rated high in potential for sand and gravel.</p>	<p>As in Alternative 3, mineral exploration and development would be affected by the closure of the ACECs to mineral material sales, affecting 2,020 acres rated high in sand and gravel potential.</p> <p>The impacts of surface land disposal actions and oil and gas leasing stipulations would be similar those of Alternative 1. Included in disposal actions would be 3,162 acres rated high in potential for sand and gravel.</p>
Impacts to Paleontologic Resources	<p>Land disposal actions in the Badlands area and subsequent development would result in degradation to a significant resource.</p>	<p>The impacts of this alternative are the same as described for Alternative 1.</p>	<p>Acquisition of an additional 1,000 acres in the Badlands will supplement public ownership and protection of a significant resource.</p>	<p>The impacts of this alternative are the same as described for Alternative 3.</p>

**Table 2-3. Summary of Alternative Impacts for the Beauty Mountain Management Area**

Environmental Topic	Alternative 1 No Action (Continuation of Present Management)	Alternative 2 Administrative Adjustments	Alternative 3 (Preferred) Sensitive Species Open Space and Recreation	Alternative 4 Use Opportunities
Impacts to Wildlife	Land disposal and subsequent development as well as mining and recreation activities would have moderately negative impacts to deer and quail habitat.  Land disposal would have moderately negative impacts to riparian habitat.	Impacts on deer and quail habitats and on riparian habitat would be the same as described for Alternative 1.	Land acquisitions and vegetation management would have highly positive impacts on deer and quail habitat and populations.  Land acquisitions would have positive impacts on riparian habitat.	Land acquisitions, land consolidations and vegetation management would have moderately positive impacts on deer and quail habitat and populations.  Land acquisitions would have positive impacts on riparian habitat.
Impacts to Vegetation	Land disposal and subsequent development would have relatively minor negative impacts to sensitive vegetation resources.  Vegetation would be negatively impacted by surface disturbance from mineral development.	Land disposal and subsequent development would have negative impacts to the South Coast Live Oak Riparian Forest and Southern Cottonwood Willow plant communities.  Vegetation would also be negatively impacted by surface disturbance from mineral development.	Land acquisitions and management under ACEC designation would have positive impacts on the South Coast Live Oak Riparian Forest plant community.  Vegetation would be negatively impacted by surface disturbance from mineral development.	Land acquisitions would have positive impacts on the South Coast Live Oak Riparian Forest plant community.  Vegetation would be negatively impacted by surface disturbance from mineral development.
Impacts to Open Space Values	Negative impacts would result primarily from disposal and subsequent development of 10,171 acres (36% of the BLM public land), of which 69% is rated high or medium in open space values. Open space values would be conserved on the 18,337 acres to be retained in public ownership (all of which is rated high or medium in open space value), although there would be localized negative impacts from activities such as mineral development.	Overall, impacts would be similar to those of Alternative 1. About the same amount of land (10,100 acres) would be affected by disposal actions, though different parcels would be involved.	Open space values of 26,516 acres (83% rated high or medium in open space value) would be conserved through their retention or use in consolidation exchange, though there would be localized negative impacts from activities such as mineral development. Negative impacts would result from disposal of 1,992 acres (38% rated high or medium in open space value)	Impacts would be the same as described for Alternative 3.

**Table 2-3. Summary of Alternative Impacts for the Beauty Mountain Management Area, (cont.)**

Environmental Topic	Alternative 1 No Action (Continuation of Present Management)	Alternative 2 Administrative Adjustments	Alternative 3 (Preferred) Sensitive Species Open Space and Recreation	Alternative 4 Use Opportunities
Impacts to Recreation Use	Land disposal and lack of providing facilities would result in the public lands not reaching their potential for meeting a share of projected regional recreational use demands. This would result in an incremental concentration of use on other available recreation lands, which would lead to an overall reduction in regional recreation opportunities and quality. Vegetation management actions would increase local opportunities for nature observation, as well as hunting. Overall, use will increase slightly to 7,000 VUD annually.	Impacts would be the same as described for Alternative 1.	Land acquisitions and the provision of recreation facilities in the Beauty Mountain SRMA, would have positive impacts to recreation use, increasing VUD to 23,000. Vegetation management actions would substantially increase local opportunities for nature observation, as well as hunting. The potential of the public lands for meeting a portion of existing and future regional recreation demand would be achieved.	Land acquisitions and the provision of substantial recreation facilities in the Beauty Mountain SRMA would have positive impacts to recreation use, increasing VUD to 41,000. Vegetation management actions would increase local opportunities for nature observation, as well as hunting. The potential of the public lands for meeting a portion of existing and future regional recreation demand would be achieved.
Impacts to Mineral Development	Land disposal actions and subsequent development for uses not compatible with mineral development would have minor negative impacts to exploration efforts and potential development.	Impacts would be the same as described for Alternative 1.	<p>Closure of two ACECs to mineral material sales, would have minor negative impacts to exploration efforts and potential development, as neither are high in sand and gravel potential and both are distant from existing markets.</p> <p>Land disposal actions and subsequent development for uses not compatible with mineral development would have minor negative impacts to exploration efforts and potential development.</p>	Impacts would be the same as described for Alternative 1.
Impacts to Watershed	Mining would impact 150 acres of prime watershed area, accelerate soil erosion, degrade riparian values and increase stream siltation.	Impacts would be the same as described for Alternative 1.	Management under ACEC designation would provide positive impacts on 5800 acres of prime watershed. Mining would have the same impacts as Alternative 3, but rehabilitation would be emphasized to minimize long-term impacts.	Impacts would be the same as described for Alternative 1.



**Table 2-4. Summary of Alternative Impacts for the Los Angeles-Orange County Management Area**

Environmental Topic	Alternative 1 No Action (Continuation of Present Management - Preferred)	Alternative 2 Administrative Adjustments	Alternative 3 Sensitive Species Open Space and Recreation	Alternative 4 Use Opportunities
Impacts to Wildlife	<p>Mineral development would negatively impact unarmored three-spined stickleback. Water quality/erosion control measures would reduce impacts to non-significance.</p> <p>Development following land disposal would negatively affect California Condor habitat but not significantly, and would have slightly negative impacts on coastal sage scrub.</p> <p>Sand and gravel extraction would have slightly negative impacts on riparian habitats.</p>	(The No Action Alternative is equivalent to Administrative Adjustments)	<p>Land acquisitions would have moderate to high positive impacts on unarmored three-spined stickleback, Least Bell's Vireo, southwestern pond turtle and California red-legged frog and riparian habitat.</p> <p>Impacts from development following land disposal of Condor habitat and coastal sage scrub habitat would be similar to those described under Alternative 1.</p>	<p>The impacts on unarmored three-spined stickleback and California Condor would be the same as for Alternative 1.</p> <p>Impacts on coastal sage scrub and riparian habitats would be the same as for Alternative 1.</p>
Impacts to Vegetation	<p>Development following land disposal would impact potential habitat for Nevin's barberry and San Fernando Valley spineflower as well as Southern Cottonwood Willow Riparian Forest.</p>		<p>Development following land disposal would negatively impact potential habitat for San Fernando Valley spineflower as well as Southern Cottonwood-Willow Riparian Forest.</p>	<p>Impacts would be the same as described for Alternative 1.</p>
Impacts to Open Space Values	<p>Open space values would be conserved on 1,902 acres to be retained in public ownership, of which 83% is rated high or medium in open space value. Oil and gas development and sand and gravel mining, however, would degrade the natural appearance of open space lands in some areas. Negative impacts would result from development following disposal of 3,711 acres of which 47% is rated high or medium in open space value.</p>		<p>Open space values would be conserved on 1,902 acres retained in public ownership, of which 83% is rated high or medium in open space value, as well as on acquired lands. Oil and gas development and sand and gravel mining, however, would degrade the natural appearance of open space lands in some areas. Negative impacts would result from disposal and subsequent development of 3,711 acres of which 47% is rated high or medium in open space value.</p>	<p>The impacts of this Alternative are the same as described for Alternative 1.</p>

**Table 2-4. Summary of Alternative Impacts for the Los Angeles-Orange County Management Area, (cont.)**

Environmental Topic	Alternative 1 No Action (Continuation of Present Management - Preferred)	Alternative 2 Administrative Adjustments	Alternative 3 Sensitive Species Open Space and Recreation	Alternative 4 Use Opportunities
Impacts to Recreation Use	Disposal of most of the lands would nearly eliminate public lands available for recreation. Increased use of the Castaic Lake parcels would provide a slight net increase in overall use to 4,000 VUD annually. Displacement of use to other areas as a result of land disposal would be a minor loss, due to the low levels of existing use.	(The No Action Alternative is equivalent to Administrative Adjustments)	Disposal of most lands would nearly eliminate public lands available for recreational use. The increased use provided at Castaic Lake and the Santa Clara River would marginally outweigh the loss of use on disposed lands by increasing net recreational use to 8,000 VUD annually.	Disposal of most lands would nearly eliminate public lands available for recreation use. Increased use of the Castaic Lake State Recreation Area parcels would provide a slight net increase in use to 4,000 VUD annually.
Impacts to Mineral Development	Disposal of surface lands and development for uses incompatible with mining would have negative impacts on exploration and possible future development. Included in disposal actions would be 732 acres with high potential for sand and gravel.  Oil and gas lease stipulations would complicate and increase the cost of exploratory efforts.		Disposal of surface lands and development for uses incompatible with mining would have negative impacts on exploration and possible future development. Included in disposal actions would be 732 acres with high potential for sand and gravel.  Oil and gas lease stipulations would complicate and increase the cost of exploratory efforts.	The impacts of land disposal and subsequent development is the same as described for Alternative 1. The acquisition of 1,000 acres in the Agua Dulce area to facilitate material sales of the large deposit of conglomerate would facilitate future material sales and sand and gravel development.  The impacts of oil and gas lease stipulations would be the same as those described for Alternative 1.
Impacts to Paleontologic Resources	Low to moderate negative impacts to fossil bearing deposits in Los Angeles County are expected as a result of development following land disposal, mining, or recreational activities.		The impacts of this alternative are the same as described for Alternative 1.	The impacts of this alternative are the same as described for Alternative 1.

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# Chapter 3 - Affected Environment

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## Introduction

This chapter presents a description of the physical, social and economic components of the planning area environment.

The first section presents a regional perspective of the planning area including socio-economic conditions, growth patterns, the increasing value of open space as well as the occurrence and importance of sensitive species and habitats. Following the initial section are descriptions of the resources found in each management area.

## Planning Area Setting

The South Coast Planning Area encompasses portions of five highly urbanized southern California counties inhabited by a burgeoning population. This population is estimated at over 16 million and is extraordinarily diverse. Over 75 languages are spoken in Los Angeles schools alone. In addition, over three million people live in Baja California, Mexico within a few miles of the border.

Ninety-five percent of the BLM land base in the planning area is in western San Diego and western Riverside counties. The remainder is in southwestern San Bernardino, Los Angeles and Orange counties. Collectively these five counties are experiencing a growth rate of nearly ten percent, which could mean a doubling of the population in some areas by the end of the decade. Within the planning area during this last year six new cities were incorporated. Expansion of development is increasingly taking over the remaining open spaces. BLM-administered land, in conjunction with four National Forests, form the basis for much of the remaining open space in the region.

The existing environment and the challenges for future management of the BLM public lands within this area are shaped by a multitude of demands related to the dynamic social and economic climate. Heavy demands are placed on resources, such as sand and gravel for construction, land for community expansion and landfills, and corridors for utility, transportation, and communication systems. Also needed, however, are viable natural habitat areas for sensitive species, open space, parks and general recreation. Both Riverside and San Bernardino counties are studying the formation of open space districts where public lands would serve as the core. In southern California there will be increasing demand for undeveloped land and the values associated with it as urban expansion continues.

The planning area is contained within the Californian biotic province (Munz & Keck, 1968). This biotic province includes the southern California coastal areas, Coast Ranges, and northern Baja California. It reaches up to the edge of the Sonoran Desert, on the northern side of the San Gabriel and San Bernardino Mountains in Los Angeles and San Bernardino County respectively, and to the eastern side of the San Jacinto and Laguna Mountains in Riverside and San Diego County respectively. The

BLM public land parcels range in elevation from near sea level to over 6,000 feet in elevation. Mean yearly precipitation ranges from 14 inches along the coast to 40 inches in the San Gabriel and Laguna Mountains, to less than 5 inches in eastern San Diego County. This east-west precipitation gradient has a profound effect on vegetation. While evergreen broad-leaf and coniferous forests can be found in coastal areas such as the western flank of Otay Mountain, the dry, rocky soils of eastern San Diego County may sustain only sparse chaparral or sage scrub plant communities that contain plants normally associated with desert communities. Twenty-six natural plant communities, as described by Holland (1986), have been identified as occurring on public land in the South Coast Planning Area (Appendix B). This range of communities includes a vast number of plant species and also provides habitat for many species of wildlife. Due to development pressures, some of these plant communities, habitats and species are becoming increasingly rare.

In all, a total of 56 sensitive plant species have been identified as occurring or potentially occurring on BLM parcels (Appendix B). There are 39 sensitive wildlife species known to occur within the planning area. As presented in Appendix B, six of these species have been identified for analysis due to their potential for being affected by this Resource Management Plan (RMP) alternatives. Sensitive plant and wildlife species include those which have been listed as threatened or endangered by the U.S. Fish and Wildlife Service (USF&WS), and those which are candidates for listing. Species listed as threatened or endangered by the state of California as well as species that have been recommended to be considered are also included as sensitive.

In addition to sensitive species, ten habitat types, identified as rare by Holland (1986) are analyzed in this document. Most of these habitat types are rapidly disappearing in southern California; a few have never been common. All ten habitat types are discussed under the vegetation discussions throughout the document. In the wildlife discussions the ten habitat types are grouped into two general classifications, coastal sage scrub communities and riparian communities. A total of approximately 130 miles of riparian habitat and approximately 11,033 acres of coastal sage scrub was identified on BLM-administered lands in the planning area. These two groups of habitat types provide significant values for sensitive species as well as general wildlife.

As urban growth occurs within the planning area, undeveloped land becomes increasingly valuable as open space. Public lands under BLM management are generally undeveloped and therefore suitable to meet regional needs for open space. Although most parcels have value as open space, some have higher value due to size, location, scenic quality or other factors. Recognizing the increasing importance of BLM lands to provide open space, each of the parcels was evaluated and rated as having high, moderate or low open space value. This rating methodology is explained in Chapter 4. Within the planning area approximately 53,226 acres (41%) of the BLM public lands were rated high and 48,992 acres (38%) were rated medium in open space value.

Nearly 20 million people live within a one-hour drive of BLM public lands within the South Coast Planning Area. With the wide variety of land forms and vegetation types present, a variety of recreational uses take place on many of the 296 parcels. Activities include equestrian use, camping, hiking, nature study, photography, off-highway vehicle use, shooting and hunting. BLM-administered land, however, is frequently not used to its full potential. Use of these public lands is most frequently limited by the lack of legal public access across adjoining private lands. In addition, potential users are often deterred from entry because the public lands are rarely signed. In some cases, access is available across another landowning agency's property, or on public roadways. The BLM lands within the planning area are perhaps the last of undeveloped public lands in the southern California without a plan for their long-term use.

## San Diego County Management Area

### Lands

The San Diego Management Area contains 64,699 acres of BLM public land which include 117 parcels, the largest of which is 18,771 acres. In addition, there are 74,140 acres of mineral split-estate land under BLM administration where the surface is privately owned. The majority of the surface parcels and acreage (58 parcels; 47,504 acres) are located in the vicinity of the U.S.-Mexico border, this is, the area south of Interstate 8. Within this area a large block of BLM-administered land surrounds Otay Mountain, the prominent peak in the San Ysidro Mountains. These mountains are comprised of narrow valleys and ridges with rugged, steep slopes and peaks. The area is noted for its unique flora properties and several vegetative associations are represented. These include True Chaparral, Coastal Sage Scrub, Oak Woodland, and Interior Cypress Forest. The lands contain populations of Tecate cypress, a rare species occurring only in southern California and Mexico. The importance of the area was recognized in 1962 through a Public Land Order establishing the Otay Mountain National Cooperative Land and Wildlife Management Area. The 16,675 acres involved are managed cooperatively by the BLM and the California Department of Fish and Game.

This San Diego County Management Area includes all of western San Diego County except the northeast corner of the county which is in the Beauty Mountain management area and the eastern portion of the county which lies outside of the South Coast Planning area. In addition to the 64,699 acres of BLM-administered public land in the San Diego County Management Area, San Diego County also contains an additional 12,889 acres within the Beauty Mountain Management area and approximately 100,000 acres in the eastern portion of the county.

### Wildlife

#### Threatened, Endangered, and Sensitive Species

Two of the six animal species of special status analyzed in the RMP (orange-throated whiptail and California Gnatcatcher) are known to occur on BLM parcels within this management area. Three other species (Least Bell's Vireo, California leaf-nosed bat, and southwestern pond turtle) have locality data records within three miles and may occur on BLM-administered public lands (California Natural Diversity Data Base {CNDDDB} 1989).

**Least Bell's Vireo (*Vireo bellii pusillus*).** This federal and State-listed endangered bird is not known to occur on BLM-administered lands within the management area. Records of the CNDDDB do, however, show 11 historical observation records within three miles of BLM lands. Review of habitat data for BLM parcels indicates that 5.3 miles of suitable habitat occurs on seven parcels; three are in the Santa Margarita River drainage, including segments of Fern Creek and Rainbow Creek, another segment is in Tim's Canyon near Santa Ysabel Creek and another is near Hauser Mountain. Least Bell's Vireo has potential to occur on parcels with suitable riparian habitat. Based on data and descriptions provided by Goldwasser (1981), Gray and Greaves (1984), RECON (1986), and Salata (1983a, 1983b) parcels with permanent or nearly permanent streams with a dense shrub layer occurring from 0.6 to 3.0 meters from the ground, and with willow dominating the canopy layer, will be considered as containing viable nesting habitat for this species. To insure compliance with the Endangered Species Act and BLM's Master Memorandum of Understanding with the California Department of Fish and Game, all parcels identified for disposal will be surveyed for vireos or vireo nesting habitat and an analysis made regarding the long-term viability of the habitat prior to disposal.

**Orange-throated Whiptail (*Cnemidophorus hyperythrus*).** McGurty (1980) summarized published

reports describing habitat characteristics for this lizard. He reported that the species was associated with low, sparse drought-resistant vegetation on level and gently sloping fine-grained soils of sandy loam texture. These habitat characteristics were further described as generally open, with mosaic patterns of alternating open and dense vegetation dominated by a variety of low chaparral and coastal sage scrub species on friable, rocky or shallow sandy soils at lower elevations. There is one record for orange-throated whiptail on a 2,832-acre BLM-administered parcel (parcel number 269-251) in the Lakeside area (M. Loy, 1985). The CNDDDB referenced 19 historical observations of this species within three miles of BLM-administered public lands. In addition, the interpretation of historical (museum and literature) records collected by Dr. Brattstrom indicates that the species may occur on four BLM parcels: 292-191, 300-121, 300-131, and 301-221.

**California Gnatcatcher (*Polioptila californica*).** According to information published by Atwood (1980), this bird's range has been severely reduced within the San Diego County Management Area by urban and agricultural expansion. Atwood reports Oberbauer's (1979) suggestion that up to 70% of the management area's original coastal sage scrub vegetation has been destroyed or modified. Eight BLM-administered parcels have been identified as having 1,015 acres of suitable habitat. Three of these parcels have recent records of California Gnatcatcher (Atwood 1980, Loy 1983, and Wier 1984). To maintain habitat for gnatcatchers, all BLM parcels with coastal sage scrub in contiguous blocks of 30 or more acres will be analyzed specifically for benefits to this species prior to any transfer from BLM-administration.

**Southwestern Pond Turtle (*Clemmys marmorata pallida*).** Brattstrom and Messer [1988] in their report to the California Department of Fish and Game document a small population in Lake Wohlford. This, then, would marginally include the adjacent parcels administered by BLM: 247-331 and 247-332. For the management area in general, however, Brattstrom and Messer opinion that:

"The damming of many of the streams in the county and the development boom have overwhelmed many ... populations. The turtle is now abundant in only a few locations."

The authors also suggest several locations as possible areas for pond turtle management/mitigation-compensation. Within the San Diego Management Area they recommend the following areas: upper reaches of the Sweetwater River, Jamul Creek, and San Mateo Creek. None of the recommended management areas contain BLM lands.

**California Leaf-Nosed Bat (*Macrotus californicus*) and Mexican Long-Tongued Bat (*Choeronycteris mexicana*).** Three families of bats are known to occur within the San Diego County Management Area; leaf-nosed bats, evening bats, and free-tailed bats. The leaf-nosed bats (*Phyllostomatidae*) are represented by two species that are listed as category 2 candidates (C2) for listing by the US Fish and Wildlife Service as "Endangered" or "Threatened". Although these species are rare in the United States, they are reported to be well-represented in Mexico and Central America (Gary Bell pers. comm., Ingles 1979). The California leaf-nosed bat has been verified as occurring on BLM lands near Otay Mountain.

**Stephens' Kangaroo Rat (*Dipodomys stephensi*) California Condor (*Gymnogyps californianus*), Unarmored Three-spined Stickleback (*Gasterosteus aculeatus williamsoni*) and Wright's Checkerspot Butterfly (*Euphydryas editha quino*).** These species do not occur within or near the San Diego County Management Area.

## Game Species

**Mule Deer.** The BLM lands within the management area are believed to support a sparse population of mule deer. The majority of opportunities for game species management occurs in the "Border Area". Otay Mountain and Hauser Mountain are the only areas identified within this management area

with a land base that is presently consolidated enough to provide opportunities for habitat management. Existing management factors impacting deer populations in these areas are: (a) poor dispersion of early seral forage areas; (b) generally poor juxtaposition of forage areas to cover areas for escape and hiding; and (c) poor public access, especially in the Hauser Mountain area.

**California Quail.** As with mule deer, quail populations tend to reach their population potential in areas with early seral vegetation associations. Populations of quail are limited in the management area by the poor distribution of water and, especially, the large acreage of mature and over-mature chaparral.

### **Important Wildlife Habitat Types**

**Riparian Systems.** The San Diego Management Area contains, overall, the most extensive riparian systems in the planning area. Almost half of the riparian systems identified on BLM surface lands are in San Diego County, including almost three-quarters of the riparian areas with oak woodland. In total the management area contains 60.6 miles of riparian systems on public lands.

**Coastal Sage Scrub.** Oberbauer, in 1979, estimated that in San Diego County seventy percent of the original coastal sage scrub had been lost to urban and agricultural development. Within San Diego County, Oberbauer estimates that 150,000 acres of coastal sage scrub remain. Of this total, 105,000 acres (70%) occur on private land. The bulk of the remaining coastal sage scrub is within military reservations. Only about 2,690 acres (or less than 2%) occur on BLM-administered parcels. Only 18 of the 117 BLM parcels in the management area were identified as having coastal sage scrub and only 13 of these parcels (containing 2,655 acres of coastal sage scrub) have coastal sage scrub in relatively undisturbed blocks of 30 acres or more.

## **Vegetation**

### **Threatened, Endangered, and Sensitive Species**

Twenty-five sensitive plant species were identified as occurring or potentially occurring on BLM surface parcels in the management area. Table B-4 in Appendix B shows by parcel number where these species occur or have potential to occur. Twenty-three plant species were identified as occurring or potentially occurring on split-estate parcels as shown in Table B-2.

### **Plant Communities**

Eighteen natural plant communities have been identified as occurring on public land in this management area. They are identified in Appendix B, Table B-3. Ten of these plant communities are considered rare by Holland (1986) and are identified as sensitive for purposes of analysis in this document. Table B-4 summarizes surface parcels that contain representative, viable samples of these sensitive communities and have high management potential for their conservation.

## **Recreation**

The San Diego County Management Area has the greatest potential to provide for the broadest range of recreational opportunities within the South Coast Planning Area. The largest blocks of BLM-administered land are found here in the closest proximity to the largest populations. The proximity of Mexico, the Pacific Ocean influence upon climate, the existing levels of use beyond that occurring in most other South Coast areas, and exceptional resource values, combine to provide the most complex, and significant recreational opportunities in the planning area. As a result of rapid growth,

however, the demand for recreation exceeds the available supply of opportunities.

Perhaps because of the availability of other recreation opportunities and historically lower use pressures, Bureau-managed lands in the San Diego County Management Area have generally retained a high degree of natural features and values. This now makes them an even more scarce and valuable commodity, and one to be carefully managed. Most of these public lands have not received high levels of recreational use. Current recreational use on BLM-administered lands in the management area is estimated to be 13,000 visitor use days annually, but this is rapidly changing. Many publications have identified BLM lands as already providing significant opportunities for undeveloped types of recreation. Other government agencies, interest groups, and individuals have all expressed strong interest in the recreational use and development of BLM-managed lands. Resource values which offer recreational opportunities abound on BLM lands in the management area. Natural areas to explore include three wilderness study areas, (with two recommended for Congressional designation as wilderness areas), most of the Santa Margarita River, (discussed in the Riverside-San Bernardino Management Area section), waterfalls and fern grottos. The area also provides unrivalled scenic vistas of Mexico, the Coronado Islands and San Diego Bay. In addition the management area contains gemstone gathering areas, outstanding opportunities for equestrian activities, and linkage to many existing units of county, state, U.S. Forest Service, and other park and recreational units. As a result of these factors, most parcels of land within this management area, especially the larger parcels, have the potential to provide for local, regional, and in some cases, national outdoor recreational needs.

Through provision of improved access and more intensive management of these lands, the Bureau has the potential to play a greater role as a supplier of recreational use opportunities. Although there are an estimated 105 miles of vehicle routes on BLM-administered lands, legal access to most parcels does not exist. The Bureau is also in an excellent position to serve as the source of lands for the use and development by other agencies under such programs as cooperative agreements and the Recreation and Public Purposes Act. These programs have already made several areas available for regional parks managed by local governments including San Diego County, the City of San Diego and the City of Poway.

## **Minerals**

The predominant mineral values within this management area are sand and gravel (salable minerals) as well as several locatable minerals. A description of mineral categories and a discussion of mineral evaluation procedures are presented in Appendix J.

### **Salable Minerals**




There are 356,338 acres classified as possessing high potential for sand and gravel on public and private land throughout the management area, including 829 acres (0.23%) of BLM-administered surface and 2,518 acres (0.71%) of BLM-administered minerals on split-estate lands. Areas with high and moderate potential for the occurrence of sand and gravel resources are shown in Map 3-1. Most of the river wash areas have been classified as having high potential for sand and gravel resources. County Report 3 (Weber, 1963) for San Diego County states that 5 of the 6 river beds consist mostly of sand. Only the San Luis River bed contains significant gravel resources. For this reason the Poway conglomerate in west central San Diego County is the county's primary source for sand and gravel.

The granitic batholith rocks were assigned a moderate potential for sand and gravel resources based on the occurrence of granite and granodiorite within this formation. However, because the available geologic mapping does not distinguish between the rocks containing greater than 10% quartz (i.e.,

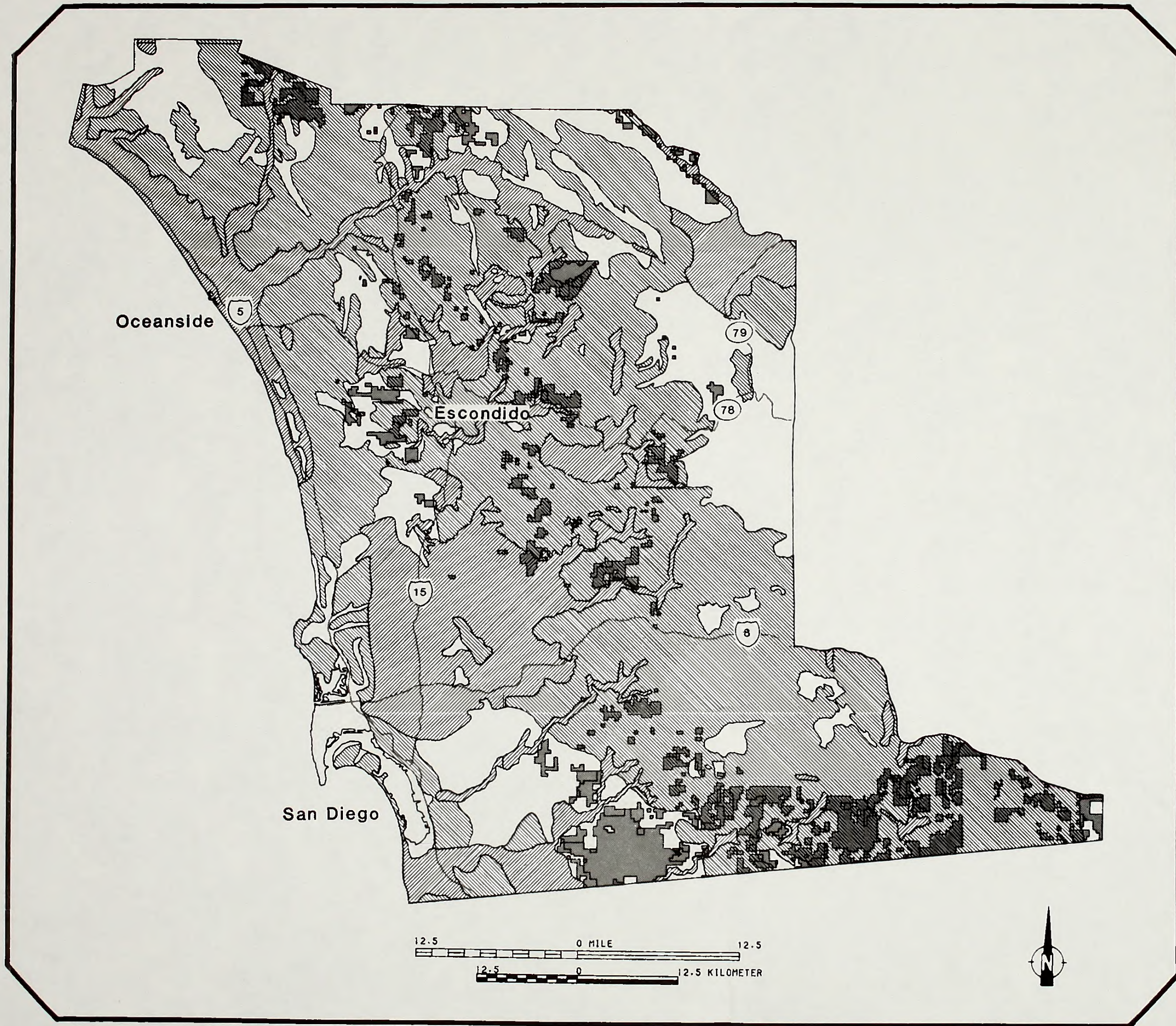


San Diego County  
Management Area

Areas Classified As Having  
High or Moderate Potential  
for Sand and Gravel  
Occurrence

-  High Sand and Gravel Potential
-  Moderate Sand and Gravel Potential
-  BLM/Public Lands (Including Split Estate Lands)

Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area

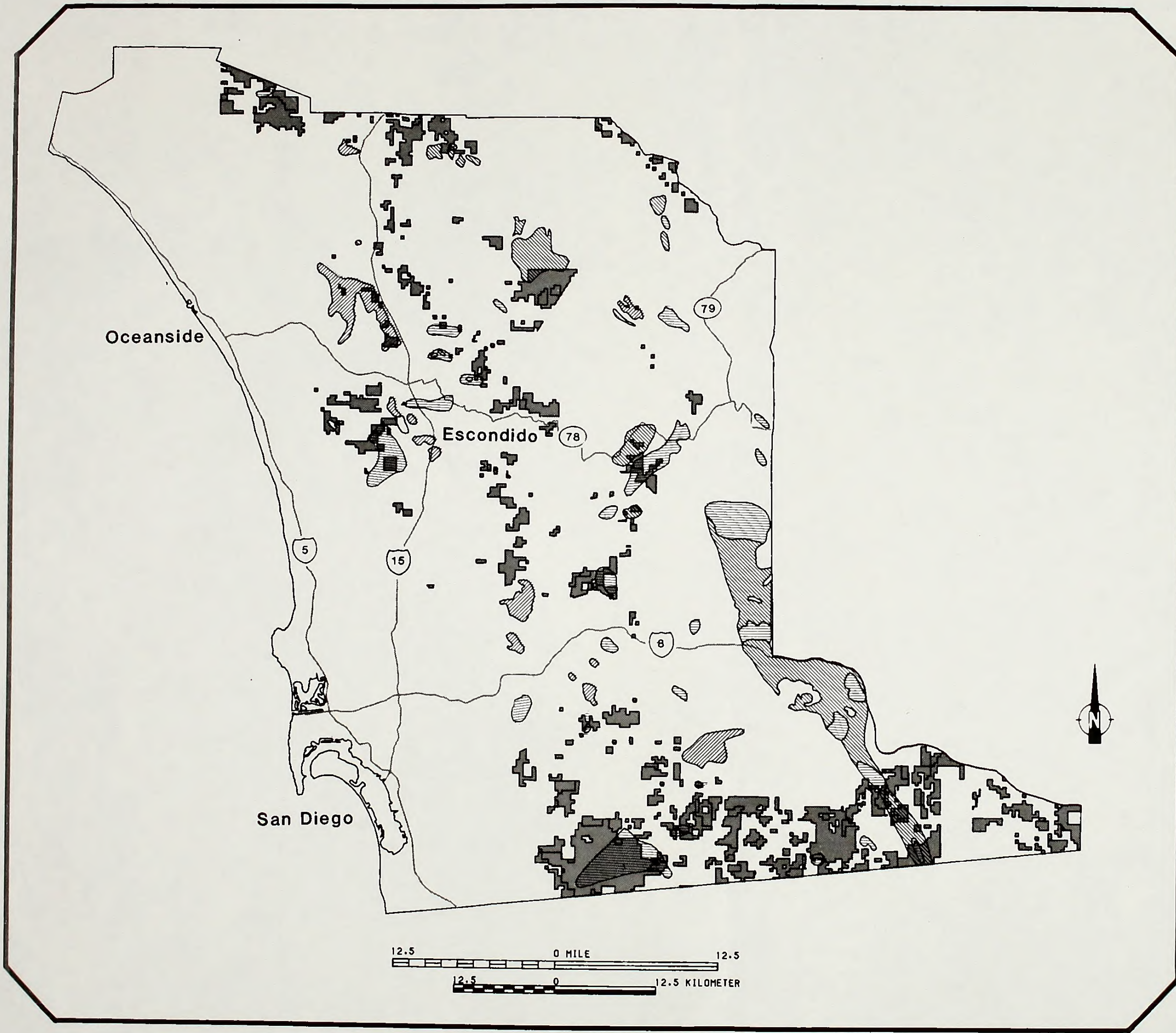




San Diego County  
Management Area

Areas Classified As  
Having High Potential  
for Gold, Gemstone,  
or Dimension Stone  
Occurrence

-  Gold
-  Gemstone
-  Dimension Stone
-  BLM/Public Lands  
(Including Split Estate  
Lands)



Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area



## Chapter 3 - Affected Environment San Diego County Management Area

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granite/granodiorite/quartz monzonite that could be used to produce aggregate) and rocks containing less than 10% quartz (i.e. tonalite and diorite that are not useful for aggregate production), it is not possible to determine the exact mineral potential on a parcel by parcel basis for the federal lands at this time. On a case by case basis some of the parcels classified as having moderate potential will actually have high potential while others will be found to contain no resources suitable for sand and gravel production. Within the management area there is a total of 396,618 acres, including public and private land, which is classified as moderate in potential for sand and gravel. Of this total 10%(38,621 acres) is BLM-managed surface lands and 13% (51,382 acres) is split estate.

Decomposed granite is mined along the western boundary of the granitic batholith rocks (Weber, 1963). This type of resource is a surface-weathering phenomenon and occurs only from 10 to 100 feet from the surface. This commodity is used for fill, road base, and drain rock. There are no current operations for this material on public lands.

### **Locatable Minerals**

The predominant locatable mineral commodities in this area are gold, gemstone and dimension stone. Areas with potential for these resources are shown in Map 3-2.

Gold resources occurs throughout the management area, but are more concentrated along the eastern boundary extending from the Boulder Creek District southeasterly to Campo near the Mexican border. The Mesa Grande and Boulder Creek gold mining districts occur within the management area. A total of 49,773 acres within the management area are classified as high in potential for gold. Of this total, 43% (21,396 acres) are on BLM-administered surface land and 5% (2,719 acres) are on BLM-administered split-estate mineral lands. There are also 10,375 acres of high potential within the Cleveland National Forest.

"Black granite" (or dimension stone) is mined from intrusive bodies of gabbroic rocks and has been used in the past for facing buildings. Presently, however it is being mined from the San Marcos Mountains northwest of Escondido for use in manufacturing of precision tool calibration equipment for the space and aircraft industry. Ninety-four acres of BLM public land in this area are classified as high in potential for dimension stone out of a total of 52,839 acres within the management area. These gabbroic rocks are also the major host rock for gemstone (tourmaline) bearing pegmatite. Many claims have been patented for gemstones within the Pala, Rincon, Mesa Grande, and Ramona gem mining districts. A total of 52,198 acres within the management area, including public and private lands, classified as high in potential for gemstone. Of this total, 6% (3,010 acres) are on BLM-administered surface land and 2% (925 acres) are on BLM-administered split-estate mineral lands. There are also 22,071 acres of high potential within the Cleveland National Forest.

The remaining mineral resources include but are not limited to isolated occurrences of various metallic minerals such as lead, molybdenum, copper, aluminum, uranium/thorium, nickel, iron, manganese, tin, and rare earths and non-metallic deposits of quartz, feldspar, clay, kyanite, perlite, and coal. There is a high to moderate potential for the occurrence of limestone in the southwestern portion of the management area within metavolcanic rocks of the Black Mountain formation. However, because this limestone has been used in the past for manufacture of numerous and varied commodities, it is unknown whether the deposits are properly considered locatable or saleable.

### **Other Mineral Resources**

All of the BLM-administered lands within the management area have been classified as having no potential for oil and gas resources and no interest is expected for oil and gas leasing or development. Barring significant advances in the technology of geothermal energy production little interest is expected in leasing or producing geothermal resources.

## Air Quality

The management area is located within the San Diego Air Basin. In general, air pollution within this area is high, with the main sources being industrial and vehicular emissions from urban centers. The levels of several pollutants often exceed federal and State of California air quality standards. Air quality on public lands is variable, depending on distance from sources of pollution and weather patterns.

## Soil and Water

The soils are predominantly of the Cienega-Fallbrook association and are excessively drained to well drained. Some of the public lands, including the Otay Mountain vicinity, contain soils of the Exchequer-San Miguel association which has rocky, well-drained soils over metavolcanic rock. Rock outcrops and exposed boulders are present in some areas, particularly on the steep slopes. The soils present have value for watershed protection and providing for wildlife habitat.

The public lands are within the watersheds of several streams which flow to the coast including the Santa Margarita River, the San Luis Rey River and the Tijuana River. Escondido Creek is impounded at Lake Wohlford, where small portions (less than ten acres total) of three parcels of BLM public land are partially inundated by the reservoir which is authorized by a right-of-way. Within the Santa Margarita River watershed, two parcels contain segments of Fern Creek and Rainbow Creek. Several springs and intermittent streams are present on other public lands within the management area, and are valuable for wildlife and recreation. Runoff from most of the area provides recharge to the alluvial groundwater basins. Beneficial uses of these groundwater supplies include irrigation and municipal, industrial, and domestic uses.

## Socio-Economics

The California Department of Finance estimates that 2.4 million people currently reside in the San Diego Region. A baseline projection for the year 2010 estimates that the San Diego region will reach a population of 3.1 million residents. In terms of absolute number, the City of San Diego added 28,700 residents in 1988; this represents a gain of only 2.7 % which is below the regional population gain of 3.9 %. Since the 1980 census there has been a regional gain of almost 30%.

More than 200,000 housing units have been added to the regional stock since 1980. About 40 % of the units completed in 1988 were in the City of San Diego. Another 17 % were built in unincorporated areas.

Employment in the San Diego region has increased by 38 % since 1980. Employment now stands at over 1.16 million.

## Cultural Resources

Many of the BLM administered parcels in this management area are small, isolated tracts averaging about one half section (320 acres) in size. Most of the large parcels are located in the southern portion of the county near the Mexican border. These include the parcels on and surrounding Otay and Hauser Mountain. The larger parcels in northern San Diego County are all under Recreation and Public Purposes Act (R&PP) leases for the benefit of surrounding urban populations. Under the terms of R&PP leases, the County of San Diego is required to either avoid or mitigate any impacts which may result from the construction of trails, picnic areas, etc.

### Chapter 3 - Affected Environment San Diego County Management Area

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The cultural resource values of a relatively greater percentage (2.5%) of the BLM-administered lands are known in San Diego than from the other management areas. This is the result of the inventories conducted by the County of San Diego in compliance with the terms of their R&PP leases and those conducted on public lands in other areas of the county by BLM. These inventories, however, have only resulted in the identification of 97 sites on BLM-administered mineral estate lands and 24 sites on BLM-administered surface lands.

Most of the archaeological sites which have been identified in this management area are either prehistoric subsistence resource activity areas, as indicated by the presence of bedrock milling features and associated midden, or lithic quarry and reduction areas. Some of the latter are reported to be of some antiquity and may date from either the early Holocene or late Pleistocene (Rogers, 1929; Moriarty, 1966).

The archaeological records check conducted for this RMP effort, and our own research, indicate strong evidence that other very important archaeological sites may be present on BLM-administered lands in San Diego County. These important sites may include quarry sites which may substantiate and yield further information on the activities of early Holocene and/or late Pleistocene populations. The evidence for the early presence of man in San Diego County is assumed due to the quarry sites which Malcolm Rogers (1929) associated with these early populations, and because of the Harris Site (SDI-149), located along the San Dieguito River which has been radio-carbon dated to 6,990 +/- 350 B.C.

Many important quarry sites are located on and around Otay Mountain. In fact, in the local Native American (Kumeyaay) dialect, Otay means "land of gathering stone." Most of the quarry and lithic reduction sites on the mountain have not been studied and consequently, protection and preservation of these sites is imperative.

Kuchamaa (Tecate Peak) and Little Tecate Peak near the Mexican border in San Diego County are of paramount importance to the Kumeyaay people because of the religious values these mountains hold for these people. These mountains have been of significant importance from prehistoric times to the present. Kumeyaay oral tradition speaks of Kuchamaa as a place for the acquisition of spiritual knowledge, power, and cleansing. Although current Kumeyaay religious practice differs significantly from the past, the spiritual and religious importance to these mountains has endured. The peak is the location where other important Kumeyaay rites and rituals currently take place, most notably during solstice periods (Robertson, personal communication).

Presently the peak of Kuchamaa is a communications site for various governmental and non-governmental agencies. As a result, there exists a potential conflict of interests between the communication site users and the various bands of the Kumeyaay, who revere the mountain for its spiritual and sacred powers.

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## Riverside - San Bernardino County Management Area

### Lands

The management area contains 29,642 acres of public land. There are 99 parcels, the largest of which is 8,000 acres. In addition, there are 34,806 acres of mineral split-estate lands under BLM-administration.

This area is currently undergoing major revisions in its planning land use planning as the various federal, state, and local governmental agencies address the need to provide lands for the preservation of the federally listed Stephens' kangaroo rat (SKR). As required by the Endangered Species Act, a Habitat Conservation Plan is presently being prepared; land use determinations made through this plan will affect both federal and non-federal lands within the species habitat range, the vast majority of which is located in western Riverside County.

The management area includes the western portions of Riverside and San Bernardino Counties which are not within the California Desert Conservation Area (CDCA). There are only four parcels of BLM public land in the San Bernardino County portion and these are within the Santa Ana River flood zone, (totaling 1,040 acres). Most of the lands in Riverside County are either in the area between Hemet and San Bernardino National Forest, or within 15 miles of Temecula and Lake Elsinore.

### Wildlife

#### Threatened, Endangered, and Sensitive Species

Ten of the 38 animal species of special status considered for analysis in the Resource Management Plan (RMP) have locality data records within three miles of BLM-administered public lands in the management area (California Natural Diversity Data Base {CNDDDB}, 1989). Of these ten, four species are known to occur on BLM-administered lands: Stephens' kangaroo rat, Least Bells' Vireo, orange-throated whiptail, and California Gnatcatcher. Two other species may occur on BLM-administered land although there are no current records: Southern Spotted Owl, and Los Angeles pocket mouse.

**Stephens' Kangaroo Rat (SKR).** Approximately 1,058 acres located over 21 parcels are known to support or have recently supported this federally listed endangered species (Montgomery, 1989 and Hicks and Cooperrider, 1977). Montgomery (1989) also identified 130 acres in 15 parcels (including four parcels with some portion occupied by SKR) as being apparently suitable for SKR habitation but, at present, only Pacific kangaroo rats (*Dipodomys agilis*) could be verified as occurring there. A total of 29 acres (three parcels with 26.3 acres and one parcel with 2.4 acres that contained an SKR population) were classified as apparently suitable SKR habitat, but without either species of kangaroo rat being present at this time.


Ten areas were delineated as potential Stephen's kangaroo rat reserve sites in the Joint Final Environmental Impact Statement and Environmental Impact Report Prepared for the Section 10(a) Permit to Allow Incidental Take of Endangered Stephens' Kangaroo Rat in Riverside County (Fish and Wildlife Service 1990). Six of these sites contain BLM-administered public lands. BLM is currently pursuing land exchanges to acquire Stephens' kangaroo rat habitat in one of these study areas (Steele Peak). The location of the potential reserve sites is shown in Map 3-3.



MAP 3-3

Riverside - San Bernardino  
County Management Area

Potential Stephens'  
Kangaroo Rat Reserves

 Potential Stephens'  
Kangaroo Rat Reserves

 BLM/Public Lands

Study Areas

1-Allessandro Heights

2-Sycamore Canyon

3-San Jacinto

4-Potrero

5-Lake Mathews

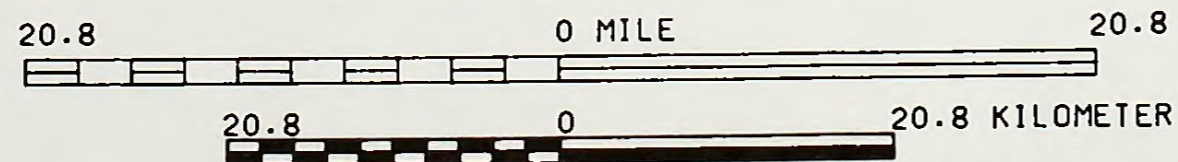
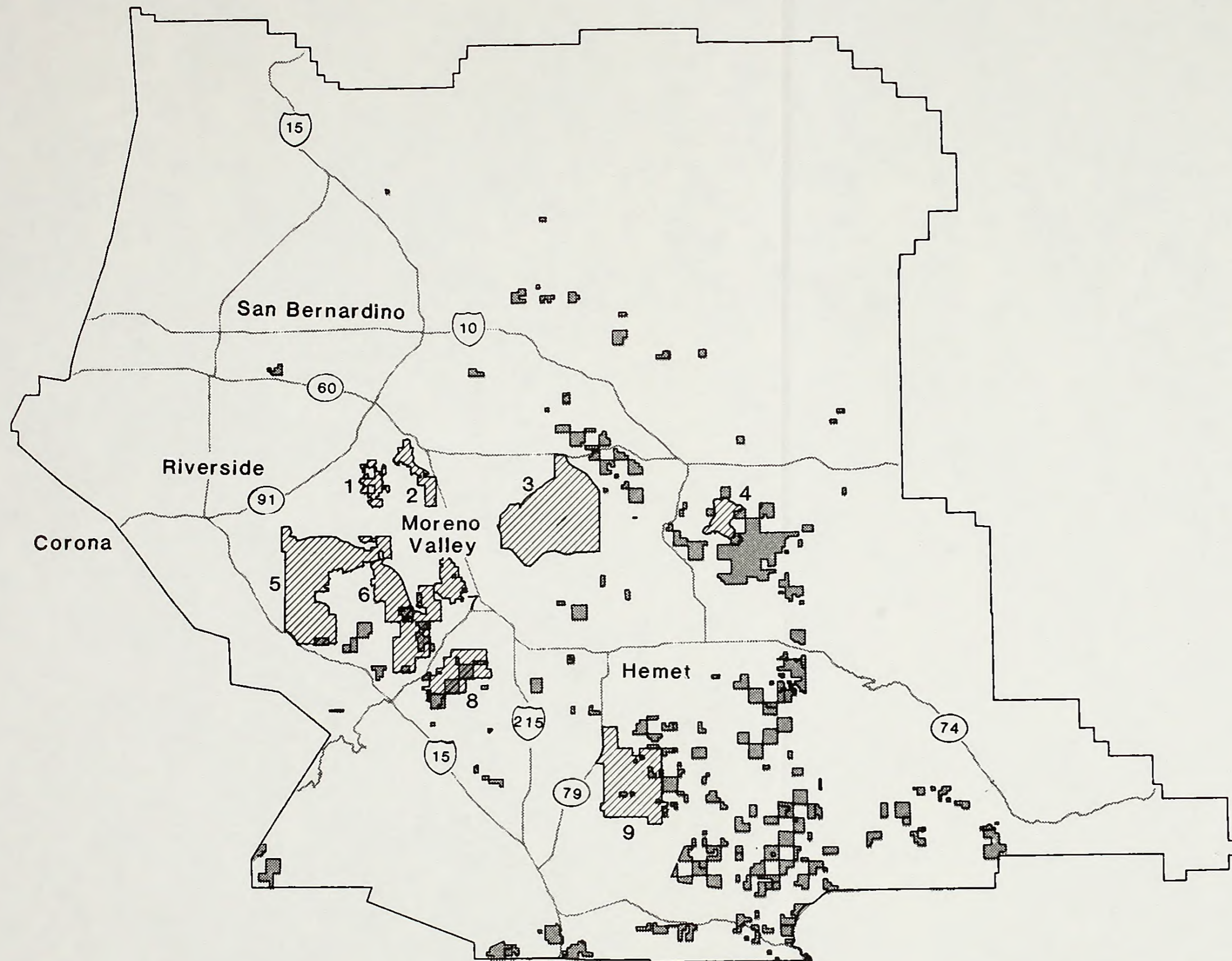
6-Steele Peak

7-Motte Reserve

8-Kabian Park

9-Winchester/Double  
Butte

Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area





**Least Bell's Vireo.** This federal and State-listed endangered species is known to occur on a single parcel within the management area (G. Bell 1988; pers. comm.). Additionally, 8.4 miles of suitable habitat has been identified on twelve parcels within the management area, including three parcels within the Santa Margarita River drainage and additional areas within the Steele Peak Reserve Study Area. Least Bells' Vireo has potential to occur on such parcels with suitable riparian habitat. Due to this potential, all parcels identified for disposal will be surveyed for vireos and an analysis will be made regarding the long-term viability of the habitat prior to disposal actions; this process will insure compliance with the Endangered Species Act and the BLM Master Memorandum of Understanding with the California Department of Fish and Game.

**Orange-throated Whiptail.** McGurty (1980) summarized published reports describing habitat characteristics for this species. He reported that the species was associated with low, sparse drought-resistant vegetation on level and gently sloping fine-grained soils of sandy loam texture. These habitat characteristics were further described as generally open with mosaic patterns of alternating open and dense vegetation dominated by a variety of low chaparral and coastal sage scrub species on friable, rocky or shallow sandy soils at lower elevations. Orange-throated whiptail have been recently observed on eight parcels within the management area, totaling 1,484 acres (Montgomery 1989, Loy 1983 and BLM staff 1989). In addition, the CNDDDB referenced 33 historical observations of this species within three miles of BLM-administered public lands. Nearly two-thirds of these observations were clustered in the area between Steele Peak and Estelle Mountain, known as the Gavilan Plateau.

**California Gnatcatcher.** According to information published by Atwood (1980) observations of this species in the Riverside County area have been infrequent in recent years. Inspection of CNDDDB records revealed three occurrences within three miles of BLM-administered public lands. All of these historical observations were in the vicinity of the proposed Steele Peak Reserve Study Area. In addition, there are 26 BLM parcels containing 3,879 acres of suitable coastal sage scrub habitat. Five of these parcels have recent records of California Gnatcatcher (Montgomery 1989). In order to maintain habitat for gnatcatchers, all BLM parcels with contiguous blocks of 30 acres or more in size containing coastal sage scrub will be analyzed specifically for this species in any exchange proposal.

**Southwestern Pond Turtle.** Brattstrom and Messer (1988), in their report to the California Department of Fish and Game, stated that this turtle is currently found in only a few widely scattered locations. The authors suggest several areas as possible pond turtle management areas. None of these areas are on BLM land. However, BLM parcels along the Santa Margarita River could support southwestern pond turtles. This river is known to support pond turtles downstream, where they are associated with beaver ponds near Fallbrook. Beaver ponds also exist on BLM-administered land and could support pond turtles.

**Spotted Owl.** This category 2 candidate species is typically found in association with steep-walled canyons that are densely wooded with mixtures of oaks and conifers (Garrett and Dunn 1981). Although there are no known occurrences of this species on BLM-administered public lands the CNDDDB does contain four historical records within three miles of BLM surface parcels. A review of these parcels, however, did not reveal any suitable habitat present.

**Los Angeles Pocket Mouse.** This federal candidate species has not been documented on BLM-administered lands. Its described habitat (Hall and Kelson 1959) is gravelly or rubble-strewn terraces on benchlands with a thin cover of shrubs.

**California Condor and Unarmored Three-spined Stickleback.** These federally-listed species do not occur within or near the Riverside-San Bernardino County Management Area.

## Game Species

**Mule Deer.** The management area is believed to support a sparse population of mule deer. Poppet Flat is the only area identified within this management area with a land base that is presently consolidated enough to provide opportunities for habitat management. Existing management factors impacting this population are: (a) poor dispersion of early seral forage areas in the Poppet Flat area; (b) generally poor juxtaposition of forage areas to cover areas for escape and hiding; and (c) poor public access.

**California Quail.** As with mule deer, quail populations tend to reach their population potential in areas with early seral vegetation associations. Populations of quail are limited in the management area by the poor distribution of water and, especially, the large acreage of mature and over-mature chaparral.

## Important Wildlife Habitat Types

**Riparian Systems.** The management area contains 34 miles of riparian system on BLM-administered public lands and an additional 26 miles on split-estate lands. The most extensive riparian areas on BLM-administered land are at the southern end of the management area and include the Santa Margarita River drainage. The riparian areas are represented by the vegetative associations shown in Appendix B.

**Coastal Sage Scrub.** Within the management area, 6,888 acres of coastal sage scrub occur on 52 BLM-administered parcels (62% of the coastal sage scrub on BLM-administered land in the planning area). Coastal sage scrub occurs in relatively undisturbed blocks of 30 acres (or more) on 47 parcels involving 6,792 acres of BLM-administered land within the management area.

## Vegetation

### Threatened, Endangered, and Sensitive Species

Twelve sensitive plant species are verified to occur or potentially occur on BLM surface parcels in the management area (Appendix B, Table B-2). Table B-4 shows by parcel number where these species occur or have potential for occurring. In addition, parcels with "gabbro" soils may contain any of three sensitive species known to occur in Riverside County, but are also identified by Beauchamp (1986) as being endemic to such soils in San Diego County. Cuyamaca larkspur, Parry's tetracoccus, and Payson's jewelflower could occur within the following gabbro-underlaid parcels: 175-081, 175-101, 175-241, 190-301, 190-302, 190-321, 205-321, 205-341, 220-041.

Sixteen sensitive plant species potentially occur on BLM-administer split-estate parcels as indicated in Appendix B, Table B-2.

Two major areas of sensitive plant species are described below:

1. **Oak Mountain (parcels 205-321, 205-341 and 220-041).** Oak Mountain is located in southwest Riverside County, approximately 7 miles northwest of the Beauty Mountain Management Area. It is almost entirely characterized by soils, which have been identified by Beauchamp (1986) as supporting an array of sensitive endemic plant species in San Diego County. The Oak Mountain area is characterized by a very interesting flora, and supports a number of rare plants. There are also a number of desert species which have unusual occurrences in this area. Three sensitive plant species have been identified on one or more of the three parcels at Oak Mountain: (a) Nevin's barberry, (b) Payson's jewelflower, and (c) Palmer's grapplinghook. The first two

species are candidates for listing by the U.S. Fish and Wildlife Service (USF&WS), and Nevin's barberry is also on the State endangered species list. Although without state or federal status of any kind, Palmer's grapplinghook has been recommended by Boyd (personal communication) as warranting conservation efforts, due to its extirpation in other parts of its range in San Diego, Los Angeles, and Orange Counties.

2. **Santa Ana River Wash (parcels 107-021, 107-101, 107-121).** The Santa Ana River wash parcels are located in southwestern San Bernardino County, 2 miles north of Redlands. They are entirely located within the alluvial floodplain system of the Santa Ana River. They are characterized by a unique alluvial scrub ecosystem that combines elements of the Mojave Desert flora, coastal sage scrub flora, and juniper woodland flora. This ecosystem appears to be dependant upon a periodic flooding regime that disturbs existing flora and deposits fresh sand and gravel sediments. Two plant species, listed by the USF&WS and the California Department of Fish and Game as endangered, occur on these parcels as follows:

Slender-horned spineflower in parcel 107-101; potential habitat for this species also exists in all three parcels

Santa Ana River woolly-star in all three parcels (107-021,107-101,107-121).

Although numerous attempts have been made, by BLM and other entities to prepare management plans for these two species none have been approved so far, and no comprehensive conservation actions have yet been taken. Most of the habitat for these two species in San Bernardino, Riverside, and Los Angeles County has been altered by urbanization, road construction, and sand and gravel extraction; current populations are threatened by similar activities as well as illegal dumping and OHV use.

## **Plant Communities**

Eleven natural plant communities have been identified as occurring on public land in this management area. Five of these plant communities are considered rare by Holland (1986): Riversidean Sage Scrub, Southern Cottonwood-Willow Riparian Forest, Southern Willow Scrub, and South Coast Live Oak Riparian Forest. Appendix B, Table B-4 lists the parcels that contain representative, viable samples of these sensitive communities.

The Santa Margarita River/Temecula Gorge (parcels 218-231, 218-261, 218-331, and 219-291) contains outstanding representative examples of riparian plant communities considered rare by Holland (1986): Southern Willow Scrub and South Coast Live Oak Riparian. Diegan Sage Scrub community, also considered rare by Holland, is well represented in parcel 218-261.

## **Recreation**

Almost all of the lands in the Riverside-San Bernardino management area have the potential to provide one or more types of recreational opportunities. Current populations, coupled with rapidly expanding growth and development throughout the management area, have created demands which have far exceeded the existing supply of recreation facilities. The result is a recognized need for BLM public lands to meet the public demand for recreation, and to provide a broader range of recreational opportunities. Demands have been identified for open space, preservation, developed facilities, and interpretation.

Many of the BLM parcels offer significant and/or unique opportunities for recreation on their own. In other instances, BLM lands in conjunction with other state or federal lands also offer significant recreational opportunities. Most parcels currently have relatively low levels of use. Existing recreation

use on public lands within the management area is 15,000 visitor use days (VUD). The public lands contain 108 miles of vehicle-accessible routes, although legal access to most parcels does not exist.

The Riverside-San Bernardino management unit possesses several recreational attributes which are found nowhere else within the planning area. These include the Santa Margarita River, (determined eligible for inclusion in the National Wild and Scenic Rivers System), Canyon Lake, (where BLM manages lands adjoining the water surface), and Poppet Flat, (where a large concentration of land is available close to urban areas). The Agua Tibia Wilderness Study Area, recommended for inclusion in the National Wilderness Preservation System also offers recreational opportunities (Western Counties Wilderness Study Project Final EIS, 1987). The presence of many plants and animals, both common and rare, offer potential for nature study, photography, and interpretation.

If the potential of these lands becomes better known, and particularly if legal access and recreational facilities are provided, greater recreational use will take place. Areas with the greatest potential include Poppet Flat, where current use is 2,000 VUD and Canyon Lake where use is 2,500 VUD. Canyon Lake is attractive to recreationists because of the presence water near a population center. Poppet flat has potential due to its relatively large size of nearly 8,000 acres.

## **Minerals**

Mineral values within this management area include oil and gas (leasable minerals), sand and gravel (salable minerals) as well as several locatable minerals. A description of mineral categories and a discussion of mineral evaluation procedures are presented in Appendix J.

## **Oil and Gas**

About 12% of the management area (279,000 acres), including both private and public land, is classified as having high or moderate potential for the occurrence of oil and gas resources. The areas of known resources and highest potential appear to be limited to the vicinity of the Prado-Corona oil fields. A total of 965 acres of BLM-administered public lands and split-estate lands lie within areas classified as high or moderate in potential. A total of 3,258 acres of BLM public lands and 2,365 acres of BLM-administered split-estate lands are classified as being low in potential.

Currently six federal oil and gas leases exist within the management area. Two of these occur on BLM-administered lands. The other four leases are within Prado Basin on lands where the surface is administered by the Army Corps of Engineers. These four leases are administered by BLM; one of these is producing oil and gas from three wells.

## **Salable Minerals**


Several areas in the northern part of the management area within the Santa Ana River wash are classified as having high potential for aggregate materials, including four parcels of BLM-administered land (1,040 acres). This area has been classified by the California Division of Mines and Geology (CDMG) as a regionally significant source of aggregate. Aggregate production from this area has been ongoing for many years on adjacent private lands, and several of the federal parcels have had aggregate production in trespass. In addition to the Santa Ana River wash, several other areas have been identified by CDMG as regionally significant sources of construction aggregate.


Within the management area 662,713 acres, including private and public land, are classified as high in potential for sand and gravel resources. BLM surface and split-estate lands comprise 0.1% and 0.5% respectively of the total land acreage with high potential. Areas with high and moderate potential for the occurrence of sand and gravel resources are shown in Map 3-4.


MAP 3-4

Riverside - San Bernardino  
County Management Area

Areas Classified As Having  
High or Moderate Potential  
for Sand and Gravel  
Occurrence

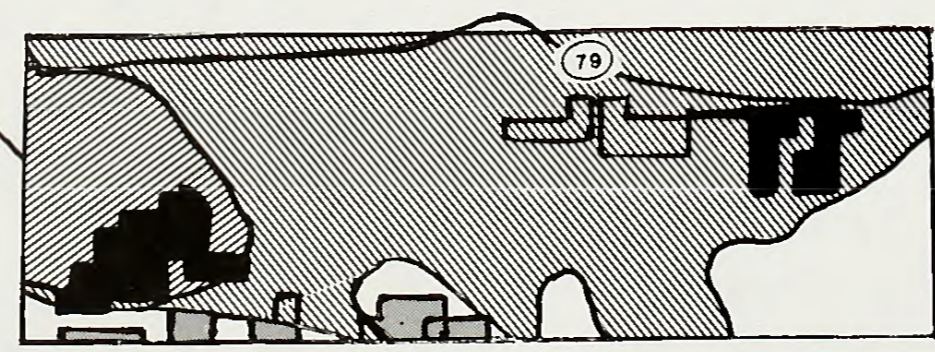
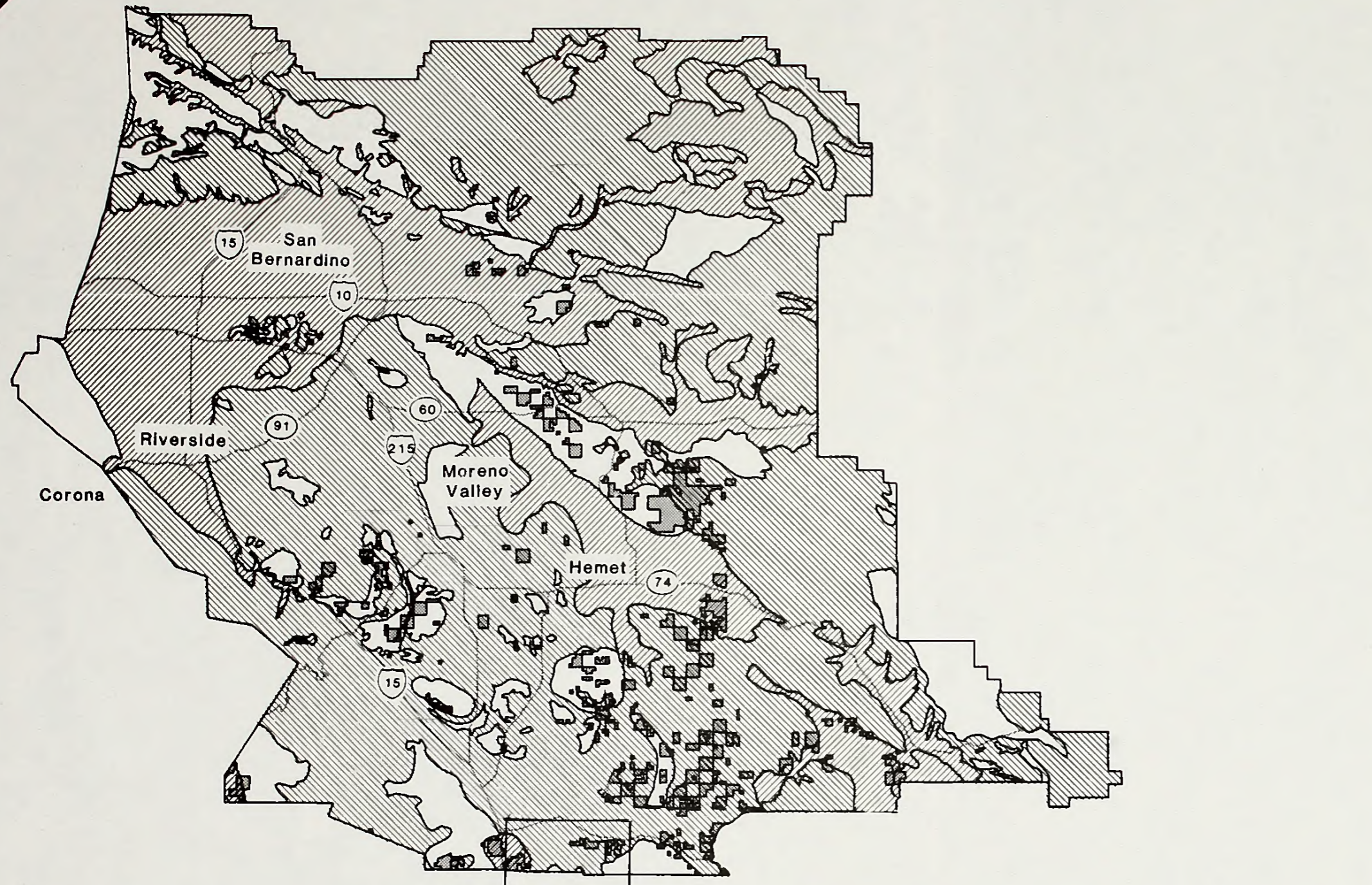
 High Sand and  
Gravel Potential

 Moderate Sand  
and Gravel  
Potential

 Potential  
Production Site

 BLM/Public Lands  
(Including Split -  
Estate Lands)

Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area







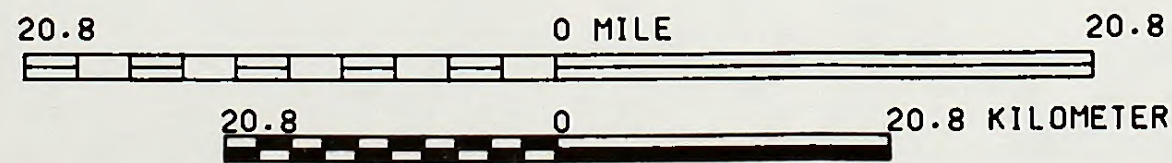
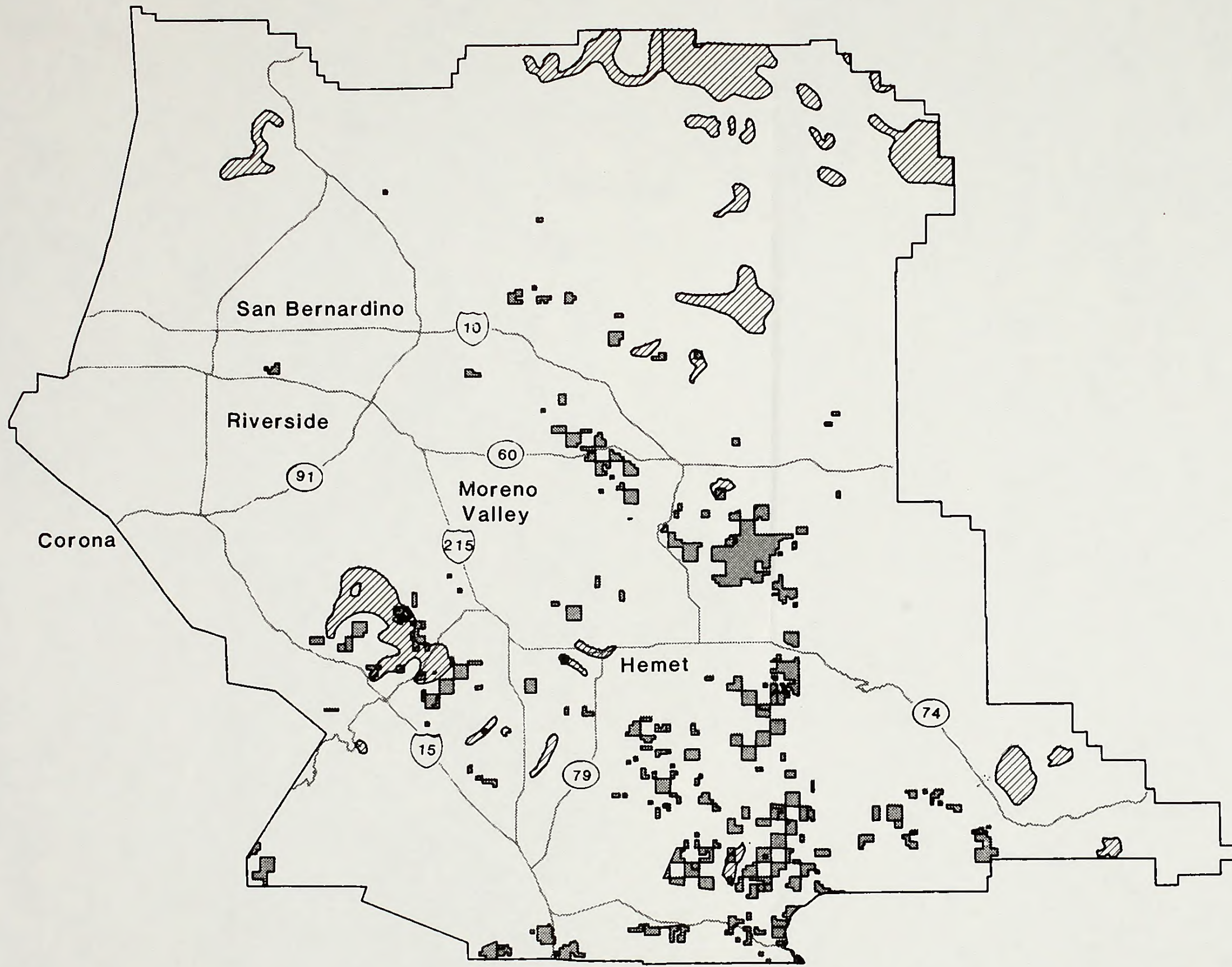


Riverside - San Bernardino  
County Management Area

Areas Classified As Having  
High Potential for Gold  
Occurrence

-  High Gold Potential
-  BLM/Public Lands  
(Including Split-Estate  
Lands)

Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area





While large parts of the central and southern portion of the management area are classified as having moderate potential for sand and gravel resources based on the CDMG's aggregate resources study, little commercially producible sand and gravel has been found. Rapid residential and business development in the Temecula area is creating a great demand for aggregate materials in the southern part of the management area and this demand is expected to continue or even increase. However, most of the aggregates used for this development are being transported long distances from central or southern San Diego County or from the Corona area (approximately 20 miles). The closest known pit for the Temecula area is on the Pala Indian Reservation, but this site is encumbered by a lease to one company.

Gravel companies, consulting firms, and contractors have recently approached the Bureau in an attempt to locate aggregate materials in the Temecula area. Three areas near the southern boundary of the management area are currently being evaluated (parcels 218-231 and 219-291) near Interstate 15 and a split-estate parcel two miles south of Vail Lake . The parcels near Interstate 15 consist of two large granitic mountains. Volumes ranging from 10 to 30 million tons (at an estimated present value of \$5,000,000 to \$15,000,000) have been suggested by interested parties. The split-estate parcel has been tested by an aggregate company and usable material on site is estimated at 1.5 to 2.5 million tons (\$750,000 to \$1,250,000).

### **Locatable Minerals**

There are 175 mining claims on BLM public lands, however, none are currently producing.

Significant deposits of clay occur south of Corona and numerous tile manufacturing plants are in operation north of Lake Elsinore. Many of these clay deposits are on private lands (patented mining claims). Several parcels of BLM public land north of Lake Elsinore are within the formation that is presently being mined for these clay resources. No operations, however, exist or are expected to begin on the BLM public lands.

There is high potential for gold to occur on the parcels just east and northeast of the Lake Elsinore area. Past mining has occurred in this area and numerous mineral patents have been issued. In the southeast and south central part of the management area, there are significant areas classified as having high to moderate potential for dimension stone, gold, and gemstone. A total of 86,397 acres within the management area are classified as high in potential for gold. Less than 3% of this area, however, is on BLM public land. Most of the area classified as high in potential (61%), is on National Forest land. Areas classified as having high occurrence potential for gold are shown in Map 3-5.

There are also isolated areas classified as high and moderate in potential for feldspar, limestone, silica, manganese, molybdenum, tungsten, and rarely iron, copper, and uranium. Because of the scattered nature of the federal lands, only a few of the parcels fall within these areas.

### **Other Mineral Resources**

Based on the CDMG's classification, areas exist around Lake Elsinore that have a high potential for the occurrence of geothermal resources; all of the remaining lands within the management area are classified as having a moderate potential for geothermal resources. No geothermal development, however, is expected within the next ten years.

### **Air Quality**

The management area is within the South Coast Air Basin, which has the worst air quality problem in

the nation. Air pollution levels within the area are high relative to federal and State of California standards set to protect public health. In 1987 the concentrations of four pollutants, ozone, carbon monoxide, nitrogen dioxide and suspended particulates all exceeded established federal air quality standards (SCAQMD, 1989). The predominant sources of air pollution are automobile and industrial emissions.

## **Soil and Water**

Soils of the BLM public lands are represented by a number of different associations. In the vicinity of Steele Peak and Canyon Lake the Friant-Lado-Escondido association is predominant. The Badlands area is comprised of the Badland-San Timoteo association. The Tollhouse-Sheephead-Crafton association occurs in the Poppet Flats area, and the Oak Mountain parcels include the Cajalco-Temescal-Las Posas association on gabbro.

Most of the management area is within the Santa Ana River watershed. The Santa Ana River provides recharge to groundwater supplies which are used for irrigation and municipal, industrial and domestic purposes. Four parcels of public land within the upper Santa Ana River wash in San Bernardino County are withdrawn for water conservation purposes. The San Bernardino Valley Water Conservation District operates groundwater recharge facilities on these parcels, authorized by a right-of-way. The Santa Ana River drains into the Prado Flood Control Basin which is operated by the Army Corps of Engineers. From Prado Basin the river drains into Orange County, where extensive groundwater recharge facilities are operated by the Orange County Water District. The San Jacinto River (within the Santa Ana River watershed) is impounded at Railroad Canyon Reservoir, also known as Canyon Lake. Two parcels of BLM public land are partially inundated by the reservoir, authorized by a right-of-way.

The southern portion of the management area drains into the Santa Margarita River, through Temecula Gorge and into San Diego County. Within Temecula Gorge, the Santa Margarita River passes through two parcels of BLM public land.

Within the watersheds of the major river systems mentioned above, many intermittent streams and several springs occur on the BLM public lands.

## **Socio-Economics**

**Riverside County.** Riverside County is the fastest growing county in the southern California region. The population is increasing on the average of 4.6% a year. The population was 757,000 in 1984. A baseline projection for the year 2010 estimates that Riverside County will have a population of almost 2 million residents. The potential for urbanization and a housing boom is certain. Currently, only 3.0% of the county is urbanized. Housing will increase by 566,000 units by 2010. Employment in the County will increase by 93%, capturing 230,000 more jobs for a total of 477,000 jobs by 2010.

**San Bernardino County.** San Bernardino County is the largest county in the nation. Most of the County, however, is within the California Desert Conservation Area and which lies outside of the RMP planning area. There were 1.0 million people residing in the county in 1984, most of whom were concentrated on only 2% of the land area (mostly within the urbanized area of the western portion of the County which is within the management area). A baseline projection for the year 2010 estimates that San Bernardino county will have a population of 2.2 million residents, or growth of 118% during the period. The housing growth rate is estimated to increase by 137% to 970,000. Employment in the county will increase by 95%, capturing 309,000 more jobs for a total of 634,000 jobs. San Bernardino County is second only to Riverside County as the fastest growing county in southern California.

## **Cultural Resources**

Less than 2% of the BLM public land in the management area has been inventoried for cultural resources. This 2% inventory has resulted in the identification of 23 prehistoric and/or historic sites. A total of 64 sites are recorded on acreage where only the mineral estate is administered by BLM. In the historical sense the Santa Ana River wash area is principally characterized by the remains of projects sponsored by the San Bernardino Valley Water Conservation District and its predecessors, which directed the local faction of the Civilian Conservation Corps between 1931 and 1938. The cultural resource inventories that have been performed in this area deal primarily with water diversion, irrigation ditches, pumping stations, canals, camp quarters and aqueduct sites dating to that period. Other common historical remains include trash dump sites, many dating from the turn of the century. These dump sites, however, are usually intermixed with more recent trash, reflecting intermittent episodes of trash disposal. Further, the dump sites have little or no association with any particular structure or event in history. Accordingly, the ability of this area to yield information on local history is negligible.

Spot inventories for cultural resource have been conducted on many of the surface parcels located in Riverside County, however, no previously unrecorded prehistoric or historic sites were identified. The absence of any cultural resources was not surprising, given the general rough topography, lack of water resources, and the sage-scrub type of vegetation which most of these parcels support. No particularly significant or notable cultural resources are known to exist on these parcels which might qualify for special management action at this time.

## **Paleontological Resources**

There are two regions in this management area which have the potential for possessing significant paleontological resources. The first area is located in an area known as the Badlands, just east of Moreno Valley in Riverside County. At this location are sedimentary deposits of Upper Miocene age which reportedly hold vertebrate fossils such as the horse, camel, and rhinoceros (Brattstrom, personal communication). The second sensitive paleontological area is located one mile north of Soboba Hot Springs, also in Riverside County. The sedimentary deposit here, known as the Soboba formation, reportedly holds at least 80 different fossilized species of chaparral and woodland plant species. These fossils date from the lower Pliocene, circa 8 million years ago.

Both the above areas are of national importance. The sedimentary deposits of the Badlands hold type deposits of many environmentally sensitive small mammal fossils. The sedimentary deposits of the Soboba formation hold environmentally sensitive plant fossils. These deposits, therefore, are important in terms of reconstructing the paleo-environment.

## Beauty Mountain Management Area

### Lands

This management area is located along the Riverside and San Diego County line, just west of Anza-Borrego Desert State Park. The northern boundary of the area is the Cahuilla Indian Reservation. State highways 371 and 79 are the western and southern boundaries. The area is the largest nearly consolidated block of public land in the planning area, and includes the Beauty Mountain Wilderness Study Area (WSA).

The management area contains 23 parcels of public land, the largest of which is 14,706 acres. Of the 22 parcels, 14 are located within Riverside County, seven are within San Diego County, and one is located within both counties. Total BLM public land acreage is 28,508. The majority of the parcels in the San Diego County surround Chihuahua Valley, and those in Riverside County are south of highway 371 and situated between Aguanga and Anza-Borrego Desert State Park. In addition, there are 21,523 acres of BLM-administered mineral estate where the surface is privately owned.

Most of the private land in proximity to the public land parcels is being used for ranching purposes or has been subdivided to allow for low to medium-density residential use. Private lands located in San Diego County are also being used for rural type (low-density) residential use, concentrated primarily along the county road in Chihuahua Valley.

### Wildlife

#### Threatened, Endangered, and Sensitive Species

Only two of the 39 animal species of special status considered for analysis in the RMP have been observed within the Beauty Mountain Management Area (California Natural Diversity Data Base {CNDDDB} 1989). Both of these species, the Los Angeles pocket mouse and orange-throated whiptail, were recorded adjacent to the western boundary of the management area and these records probably represent the eastern extent of these populations' natural ranges.

**Los Angeles Pocket Mouse.** This federal candidate species is, technically, a subspecies of a widely distributed species known as the little pocket mouse. The type specimen for the subspecies is from San Bernardino and records of the subspecies near the Beauty Mountain Management Area define the margin of its range (Hall and Kelson 1959). There are no known occurrences of this subspecies on public lands within the management area. The management actions taken as a result of the RMP, therefore, will have little or no effect on this species.

**Orange-Throated Whiptail.** California Natural Diversity Data Base (CNDDDB) records for this sensitive species show a single occurrence within the management area. This particular observation was near Highway 79 adjacent to the western boundary of the management area. Based on published reports, the species is typically found below 1500 feet (McGurty 1981) which is considerably below the 3000 to 5500 foot elevation range found in this management unit.

**California Gnatcatcher.** According to Atwood (1980) this species typically occurs in moderately dense coastal sage scrub communities below 2000 feet in elevation. The entire management area is above this elevation and, consequently, this species would not be expected to occur on public lands in this area.

**Least Bell's Vireo.** There are no CNDDDB records for this species in or near the management area.

## Chapter 3 - Affected Environment Beauty Mountain Management Area

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Since potentially suitable habitat for this species does occur within the management area, all parcels with potential habitat identified for disposal will be surveyed for vireos to ensure full compliance with the Endangered Species Act.

**California Condor and Unarmored Three-spined Stickleback.** These federally listed endangered species do not occur within or near the Beauty Mountain Management Area.

### Game Species

**Mule Deer.** The management area is thought to support a low to moderate population of mule deer. At present the population is basically unexploited. Identified management factors impacting this population are: (a) poor dispersion of early seral forage areas over the management area; (b) generally poor juxtaposition of forage areas to cover for escape and hiding; (c) poor distribution of water; (d) competition with livestock; and (e) poor public access.

**California Quail.** As with mule deer, quail populations tend to express population potential with early seral associations. Populations of quail are limited in the management area by the poor distribution of water and, especially, the large acreage of mature and over-mature chaparral.

### Important Wildlife Habitat Types

**Riparian Systems.** The management area contains 28.2 miles of riparian systems on BLM-administered land.

**Coastal Sage Scrub.** Within the management area, 160 acres of coastal sage scrub occur on a single parcel of BLM-administered land. Most of the Beauty Mountain Management Area lies outside of the natural distribution of coastal sage scrub.

## Vegetation

### Threatened, Endangered, and Sensitive Species

No sensitive plant species are known to occur on BLM surface parcels within this management area (Appendix B, Table B-2). However, six sensitive plant species were identified as potentially occurring on BLM surface parcels. Table B-4 shows where these species have high and moderate potential to occur by parcel number.

Six sensitive plant species were identified as potentially occurring on BLM split-estate parcels (Table B-2).

### Plant Communities

Ten natural plant communities have been identified as occurring on public land in this management area. They are identified in Appendix B. Three of these plant communities are considered rare by Holland (1986): the Diegan Sage Scrub, the Southern Cottonwood-Willow Riparian Forest, and the South Coast Live Oak Riparian Forest.

Table B-4 lists the parcels that contain representative, viable samples of these communities.

## Recreation

Legal access to most of the BLM-administered lands within the management area does not currently exist. One such parcel without legal access is the 15,114 acre Beauty Mountain parcel, which contains the 11,342 acre Beauty Mountain Wilderness Study Area (recommended as not suitable for Congressional designation as wilderness). The Beauty Mountain parcel and surrounding public lands have the potential to provide several types of recreational opportunities. Growth and development within the management area, and even more so in the region as a whole, are expected to create a demand exceeding the existing supply of recreational facilities. The result is a recognized need for Bureau lands to satisfy some of the public demand for recreation, and to provide a broader range of recreational opportunities.

The BLM does not have any developed recreation sites or facilities within the management area. The Cleveland National Forest manages three campgrounds, and there is one private recreational vehicle camp within the area. The Pacific Crest National Scenic Trail (PCT) passes through the area, but does not cross BLM land. The old, and largely abandoned California Riding and Hiking Trail does cross some parcels of BLM land, forming the eastern boundary of the Beauty Mountain Wilderness Study Area. There are an estimated 32 miles of vehicle routes on BLM public lands within the management area.

For the most part, relatively little recreation currently takes place on these BLM lands. This is not due to a lack of demand, but rather due to a lack of knowledge of the recreational opportunities available, lack of legal access, lack of developed facilities, etc. Where recreation is known to occur on these public lands, it is generally similar to that which takes place on other lands in the management area, i.e. off-highway vehicle use, equestrian, hiking, camping, and other activities. Current use is estimated to be 6,000 VUD annually. Greater use occurs on U.S. Forest Service lands, and especially on developed lands under their management.

## Minerals

The predominant mineral values within this management area are in the category of locatable minerals such as tungsten and gemstone. A description of mineral categories and a discussion of mineral evaluation procedures are presented in Appendix J.

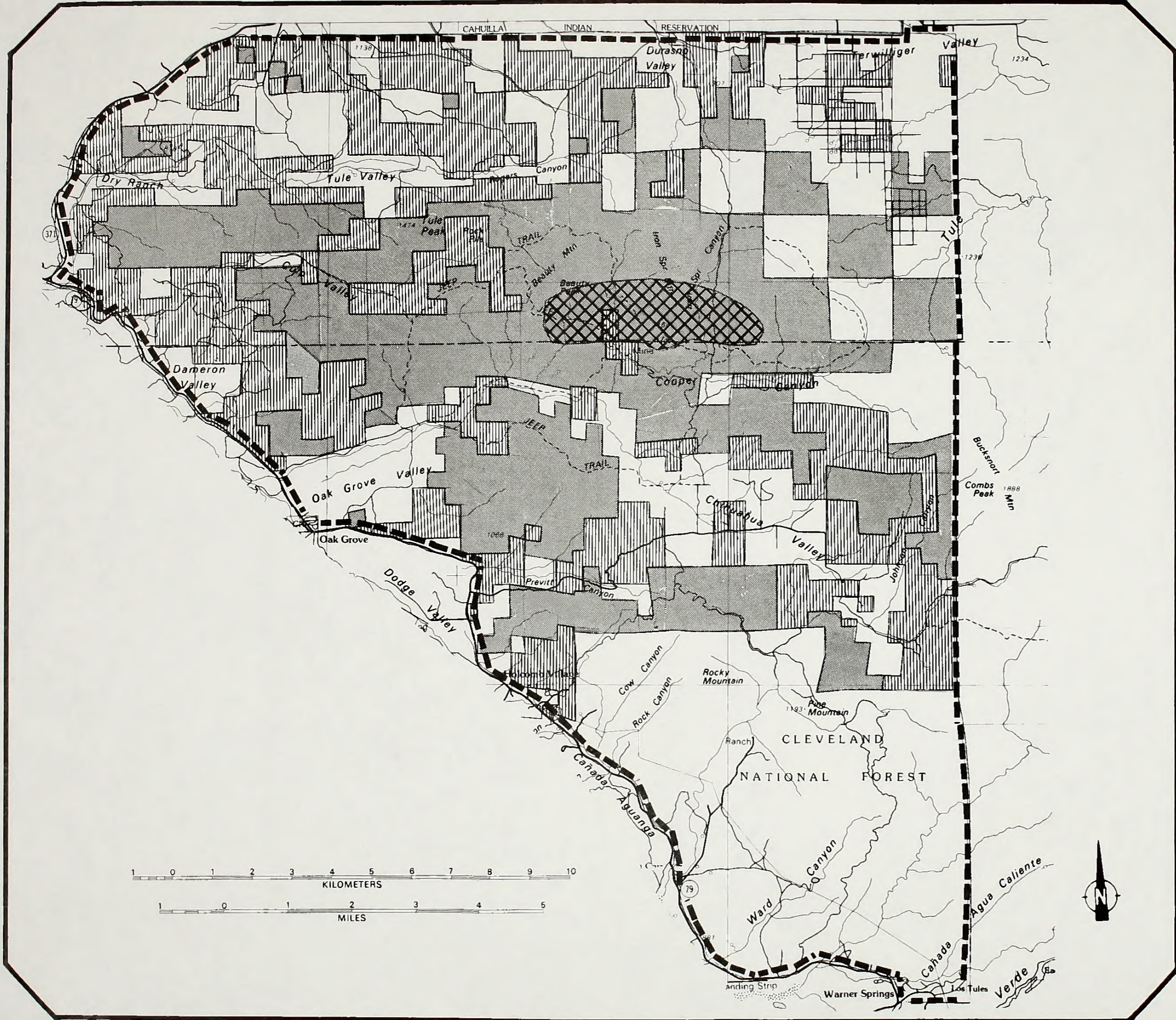
## Oil and Gas

The entire Beauty Mountain Management Area was classified as having no potential for oil and gas resources.

## Saleable Minerals



There is a high potential for the occurrence of aggregate resources along Temecula Creek on the southwestern boundary of the management area, Chihuahua Valley to the east and Terwilliger Valley in the northeast. However, only small parcels of BLM-administered public and split-estate lands occur in the areas classified as having a high potential for aggregate resources. BLM public surface lands and split estate lands are 7% and 18% of the total land area of 15,897 acres which is classified as high in potential for sand and gravel resources. Most of the high potential areas are located on privately owned lands. No locations within the management area were classified as regionally significant sources of construction aggregate by the State Division of Mines and Geology. Moderate potential exists for the occurrence of sand and gravel within the Granitic Batholith rocks. However, because these rocks are a complex association of granite, granodiorite, diorite, tonalite and adamellite areas, where rocks occur that contain sufficient quartz needed for it to be useful as aggregate





### Beauty Mountain Management Area

Areas Classified As Having High Potential for Tungsten Occurrences

-  High Tungsten Potential
-  Boundary of Management Area
-  BLM/Public Lands
-  Mineral Split-Estate

Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area



## Chapter 3 - Affected Environment Beauty Mountain Management Area

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material will have to be determined on a case-by-case basis. Demand for large quantities of sand and gravel resources is assumed to be low due to the rural nature of the area, and lack of major construction activity relative to the more urban areas in the region.

### Locatable Minerals

The Beauty Mountain WSA is within this management area. The mineral evaluation for the WSA found that there is a potential for Tungsten at the Pawnee Mine about 1 mile southeast of Beauty Peak located on patented mining claims. Throughout the WSA prospect pits can be observed and historically the California Journal of Mines and Geology (Vol. 35, Jan. 1939) shows several mines located near the southern boundary of the WSA. These mines and prospects occur on and around the faults near the formation contacts. There are 1,725 acres of BLM public lands classified as high in potential for tungsten. The areas classified as having high in potential for tungsten are shown in Map 3-6.

East of the WSA there is a high potential for gemstone (tourmaline) occurrence along an unnamed fault. A total of 463 acres of BLM surface lands are classified as high in potential for gemstone. Mining of gemstone is being conducted on an intermittent basis by a mining claimant. Large (3-8 foot) intrusive quartz veins containing numerous tourmaline crystals of varying size have been observed.

There are a total of 14 mining claims on BLM public lands within the management area. No mining plans of operations have been submitted within the last 10 years.

### Other Mineral Resources

There is a moderate potential for the occurrence of geothermal resources due to the close proximity of the Elsinore Fault Zone and known faults that cut the management area.

### Air Quality

Since the management area is within both Riverside and San Diego Counties, it is located within the South Coast Air Basin and the San Diego Air Basin. Air pollution levels within these air basins are high relative to federal and State of California standards.

Air quality in the Beauty Mountain area, however, is somewhat different than the airbasin as a whole in that it is miles away from major sources of pollution, such as major highways within traffic volume. This means that some pollutants, carbon monoxide in particular will be relatively low.

### Soil and Water

The soils are predominantly of the Tollhouse-Sheephead-Crafton association; excessively drained to well drained on gently rolling to steep slopes. They are shallow to moderately deep with a surface layer of loam on granitic rock, susceptible to accelerated erosion if disturbed. Rock outcrops and exposed boulders are present in some areas, particularly in the steep slopes. The soils present have value for watershed protection and providing for wildlife habitat.

Runoff from most of the area provides recharge to the alluvial groundwater basin of the Temecula Valley. Some of the area, however, is within the San Luis Rey River basin, including the upper reaches of the river. Beneficial uses of water include irrigation, municipal, industrial, and domestic uses. Numerous springs and intermittent streams are present within the canyons on the area, and

are valuable for wildlife and recreation.

## Cultural Resources

The cultural resources within the Beauty Mountain Management Area are little known. Less than 1% of the total acreage of the area, including the mineral estate lands, has been inventoried.

The region is principally a water shed area, comprised of many springs, major drainages and small rivers. As a result, it sustains riparian areas which support known prehistorically important vegetal subsistence resources such as coast live oak. Of the known sites, 77% may be described as seasonal camps associated with granite bedrock milling features, many with associated subsurface cultural deposits. The other features of these prehistoric sites reflect, hunting, quarrying, and lithic reduction activities. Most surface remains contain pottery, indicating a relatively late, or at least a late terminal date. Many of these seasonal camps are also associated with prehistorically inhabited rock shelters.

As a result, the Beauty Mountain Management Area has a high potential to yield important information on the area's prehistory. The cultural resources within the Beauty Mountain Management Area are little known for their archeological and historical values. Less than 1% of the total acreage of the area, including the mineral estate, has been inventoried. The region is primarily a water shed ecological zone, comprised of many springs, major drainages and small rivers. As a result, it sustains many riparian habitat areas, which include many primary vegetal subsistence resources important to prehistoric populations. As anticipated, the known cultural remains of the area and surrounding environs strongly suggest that this area was of importance prehistorically for the collection and processing of seeds, primarily acorns. Other features of the prehistoric sites reflect, in order of occurrence, hunting, quarrying, and the subsequent reduction of crystalline quartz. Of the known sites, 77% may be described as seasonal camps associated with granite bedrock milling features, many of which are associated with a subsurface cultural deposit. Surface remains of most the sites contain Tizon brown or other ware indicating a late date, or at least a late terminal date. Interestingly, many of these seasonal camps are also associated with formerly inhabited rock shelters. As a result, the Beauty Mountain Management Area has a high potential to yield important information on this region's prehistory.

## Los Angeles - Orange County Management Area

### Lands

The management area includes the portion of Los Angeles County which is not within the California Desert Conservation Area (CDCA), as well as all of Orange County. It includes the densely populated Los Angeles basin. The public lands within the area, however, are mostly located in the outlying areas of northern Los Angeles County in the vicinity of the Santa Clarita Valley, Castaic Lake, and the Santa Susana Mountains. The communities of Palmdale and Lancaster are in the CDCA and therefore are not within the management area.

The area contains 5,613 acres of BLM public land. There are 57 parcels, the largest of which is 771 acres. Of these parcels, only one (1.35 acres) is located in Orange County. In addition there are 36,279 acres of federal mineral estate where the surface is privately owned.

### Wildlife

#### Threatened, Endangered, and Sensitive Species

There are 12 sensitive wildlife species are known to occur within the management area. Only two of these species, however, are expected to be potentially impacted by Resource Management (RMP) decisions and have been selected for analysis (see Appendix B).

**Unarmored three-spined stickleback.** This endangered fish species does not occur on public lands. Its range within the Santa Clara River is, however, adjacent to several small BLM-administered public land parcels and split-estate lands with moderate to high potential for development of aggregate material. This, then, puts the species in a position of potentially being impacted from secondary impacts related to sand and gravel extraction, such as increased sediment loads.

**California Condor.** This federally-listed and state-listed endangered species does not, at present, occur in the wild. The United States Fish and Wildlife Service (USF&WS) does, however, plan to initiate releases of captive birds back into previously occupied habitat. These releases may begin as early as 1991. Based on studies of released Andean condors by the USF&WS, probable condor habitat was designated as core use area, main range limits, or areas of expected extension of condor range. Core use areas were defined as the area where condors concentrate their activities such as feeding, roosting, and the majority of their flight activity. The main range limits constitute the area where the Andean condors spent ninety percent of their time. While the expected extension of condor range is based on areas known to have previously been used by wild California condors and still appear to retain suitable habitat constituents for condors. Based on the USF&WS analysis of probable condor habitat, a total of 780 acres of public lands occur within the core use area with an additional 4826 acres within the area identified as the limit of the condors' main range. Condor habitat areas are shown in Map 3-7.

The following species, while selected for analysis in other management areas (See Appendix B), are not expected to be affected by RMP decisions in the Los Angeles-Orange County management area.

**Least Bell's Vireo.** This endangered species, although it occurs within the overall management area, is not known (or believed) to occur on or near any of the scattered public parcels considered in any of the addressed alternatives.

**California Gnatcatcher.** This sensitive species is endemic to southern California and has been reduced to less than 2000 known breeding pairs (Atwood 1980). The species appears to be obligate to moderately dense stands of coastal sage scrub communities (Riversidian and Diegian Sage Scrub) below 2000 feet elevation which are dominated by California sagebrush (*Artemisia californica*) and/or California buckwheat (*Eriogonum fasciculatum*). According to Atwood (1980) habitat for the species has been greatly eliminated in Los Angeles County. He further opinions that the Palos Verdes Peninsula is the only area in the county where representatives of this species have been regularly observed in recent (late 1970's) years. Based on Atwood's descriptions 190 acres of suitable habitat occurs on two parcels within the management area. The remaining coastal sage scrub habitat within the management area does not contain the elements indicative of suitable habitat.

**Stephens' Kangaroo Rat and Orange-throated Whiptail.** These special status species do not occur on public lands within this management Area.

### Important Wildlife Habitat Types

**Riparian Systems.** The management area contains nine miles of riparian system on BLM-administered public lands and an additional 55 miles on BLM-administered split-estate lands. This mileage is represented by the vegetative associations shown in Appendix A.

**Coastal Sage Scrub.** Coastal sage scrub occurs on 1,295 acres over 18 BLM-administered public land within the management area. This includes 12 parcels with 1,210 acres where the coastal sage scrub occurs in relatively undisturbed blocks of 30 acres or more.

## Vegetation

### Threatened, Endangered, and Sensitive Species

No sensitive plant species are known to occur on BLM surface parcels within the management area. There are, however, six sensitive plant species which potentially occur and would, therefore, possibly be affected by the RMP (Table B-2). These include one species, slender-horned spineflower, which is federally listed as Endangered. Table B-4 in Appendix B shows where these species have potential to occur by parcel number.

Seventeen sensitive species have potential to occur on BLM split-estate parcels (Table B-2).

### Important Plant Communities


Thirteen natural plant communities have been identified as occurring on public land in this management area. Of these, five are selected as important for analysis because they are uncommon, represent unique species diversity, and/or are in decline due to disturbance from development pressures. These five are Southern Sycamore-Alder Riparian Woodland, Southern Cottonwood-Willow Riparian Forest, South Coast Live Oak Riparian Forest, Southern Willow Scrub, and Riversidean Sage Scrub.


## Recreation


Most recreational use within the management area occurs on just a few parcels. Two parcels contain a total of 1.5 miles of the Pacific Crest National Scenic Trail (PCT) and receive an estimated 1,000 VUD annually. There are five parcels of BLM-administered land adjacent to the Castaic Lake recreation area which receive an estimated 2,000 VUD annually. For the most part, however, there is relatively little recreational use of the BLM public lands. This is


Los Angeles-Orange  
County Management Area

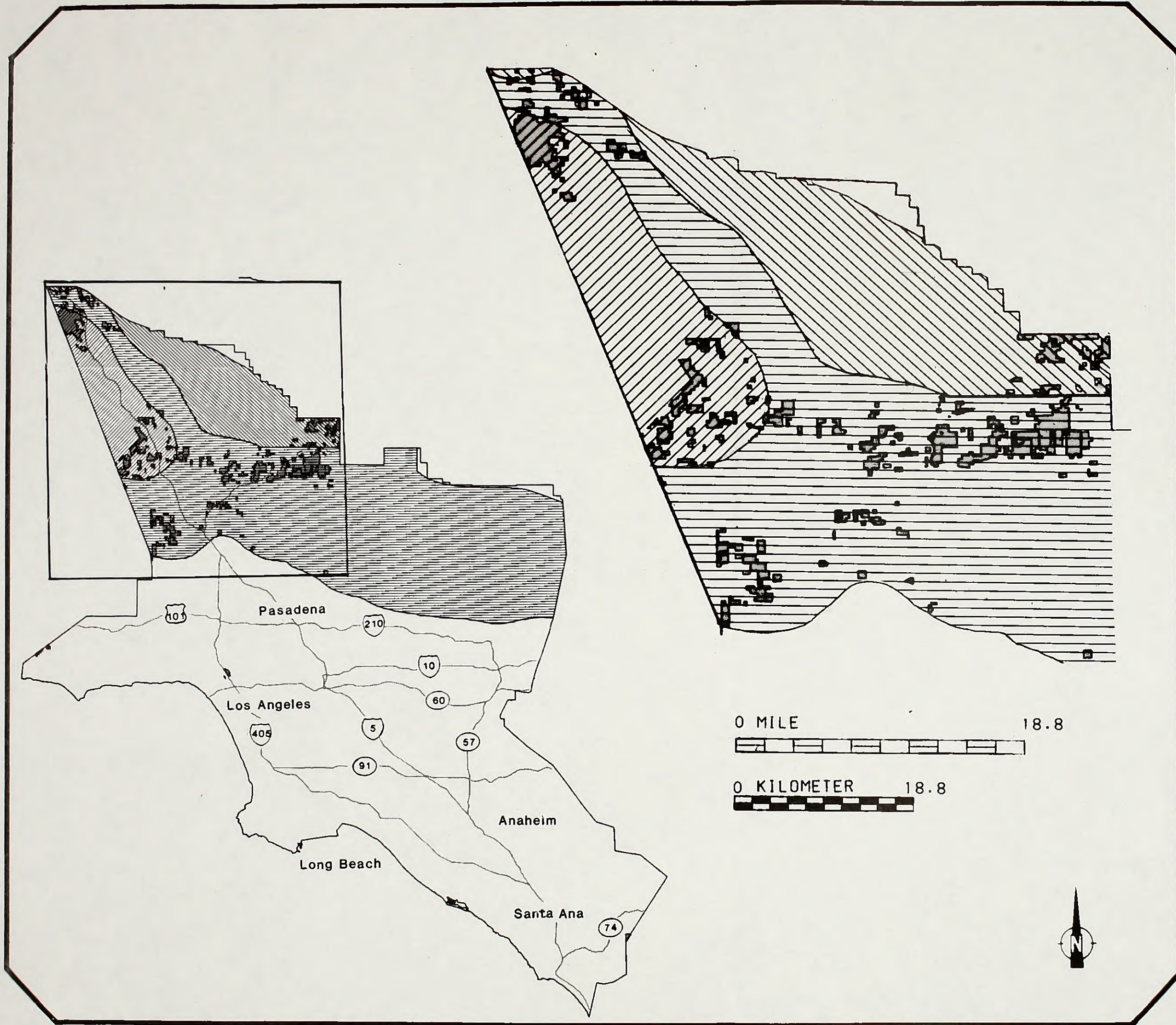
Condor Habitat Areas

 Condor Core Use Area

 Condor Main Range

 Expected Extention of Range

 BLM/Public Lands  
(Including Split Estate  
Lands)



Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area





## Chapter 3 - Affected Environment Los Angeles - Orange County Management Area

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particularly true in relation to the use that occurs on lands managed by other agencies such as the U.S. Forest Service (Angeles National Forest) and the Castaic Lake State Recreation Area and Hungry Valley OHV area). Use is limited on BLM lands primarily because of the small and isolated land base (5,600 acres consisting of mostly small and isolated parcels without legal public access). In addition, none of the parcels are developed to provide any structured form of recreation experience.

There is a total of 15 miles of vehicle routes on the lands, mostly divided into segments of less than one mile, due to the scattered nature of land ownership. Most of these routes are not legally or physically accessible to the public.

A few of the parcels are generally accessible to the public, and some parcels are used by adjacent landowners who are able to gain access. Where use does occur, activities include hiking, nature study, photography, horseback riding, off-highway vehicle use, shooting and hunting. The estimate of use on all BLM public lands within the planning area is 5,000 VUD annually.

### **Minerals**

Mineral values within this management area include oil and gas (leasable minerals), sand and gravel (salable minerals) as well as several locatable minerals. A description of mineral categories and a discussion of mineral evaluation procedures are presented in Appendix J.

### **Oil and Gas**

Within the management area, there are total of 1,070,283 acres which are classified as having high or moderate potential for oil and gas. The areas of known resources and highest potential appear to be limited to the Los Angeles and Ventura basins and associated with Miocene and Pliocene age rocks (12,000,000 to 3,000,000 years before present) of marine origin. Within areas classified as having high potential there are 17,318 acres of BLM-administered public and split-estate lands, which is less than 2 per cent of the total. The classifications of oil and gas occurrence potential are shown in Map 3-8.

There are currently 98 leases on lands where oil and gas rights are federally owned. Most of these leases (76) are on BLM public lands or split-estate lands, but there are also 22 leases involving the lands of other federal surface managing agencies (21 within the Angeles National Forest and one on Veterans Administration property).

From 1979 through 1988, 1583 oil and gas wells were drilled within the management area. Most of these wells were drilled within existing proven oil and gas fields. Almost all of the new wells were drilled on private or state owned lands. A few were drilled on BLM public lands, split-estate lands, or the lands of other federal surface managing agencies. Drilling of new wells has shown an irregular decline and production has shown a steady decline during this period. Only about 65 of these wells were exploratory wells.

### **Salable Minerals**

The principal demand for saleable minerals within the management area is sand and gravel, used for construction aggregates. Based on an estimated annual per capita consumption of five tons annually (Reining, 1985), the total demand within Los Angeles and Orange Counties is 50 million tons per year. The available supply of aggregate materials is ever decreasing as the reserves of existing operations are depleted and as the mining of other deposits is precluded by the expansion of incompatible land uses.

The California Division of Mines and Geology (CDMG) has completed a comprehensive study of

aggregate minerals in southern California. This study was used to classify the management area into zones of high, medium and low potential for the planning effort. Generally, washes, valley areas, and areas near the margins of igneous mountains contain known significant aggregate resources or areas of high potential. Mountains containing granitic rock formations but not classified in the CDMG study were classified by geologic inference as having moderate potential for aggregate resources in the form of granite and other rock bodies that possess a high percentage of quartz. Areas along the coast that are farther away from the igneous mountains and the marine sedimentary rocks of the Santa Monica Mountains were classified as having a low potential for aggregate resources.

A total of 577,361 acres within the planning area were classified high in potential for sand and gravel resources. Areas classified as having high or moderate potential for sand and gravel resources are shown in Map 3-9. One per cent (or 1,015 acres) of the area classified as having high potential is on BLM-administered surface land. There are also, however, 8,865 acres of BLM administered split-estate acreage with high potential, including a major known deposit of sand and gravel in the Soledad Canyon area. This deposit, estimated to be several hundred million tons, is classified by CDMG as a regionally significant source of aggregate. In 1989 BLM completed a competitive sale in this area, and sold 56 million tons with a bid value of \$28 million. Unless encumbered with incompatible surface uses, the demand for additional sales of this deposit will increase in the future.

### **Locatable Minerals**

High to moderate potential areas for gold, lead, graphite, and clay exist on the federal lands within the management area. Most of the past mining and prospecting for locatable minerals, however, has been within the Angeles National Forest. Of a total 79,367 acres classified as high in potential for gold, 64% are within the Angeles National Forest. Of these 79,367 acres 471 acres or less than one percent are BLM managed surface. There are currently eight mining claims on BLM public lands, but no mining plans of operation have been submitted within the last ten years, and on average less than one notice of operation is received per year. Similar levels of activity are expected for the future.






### **Other Mineral Resources**

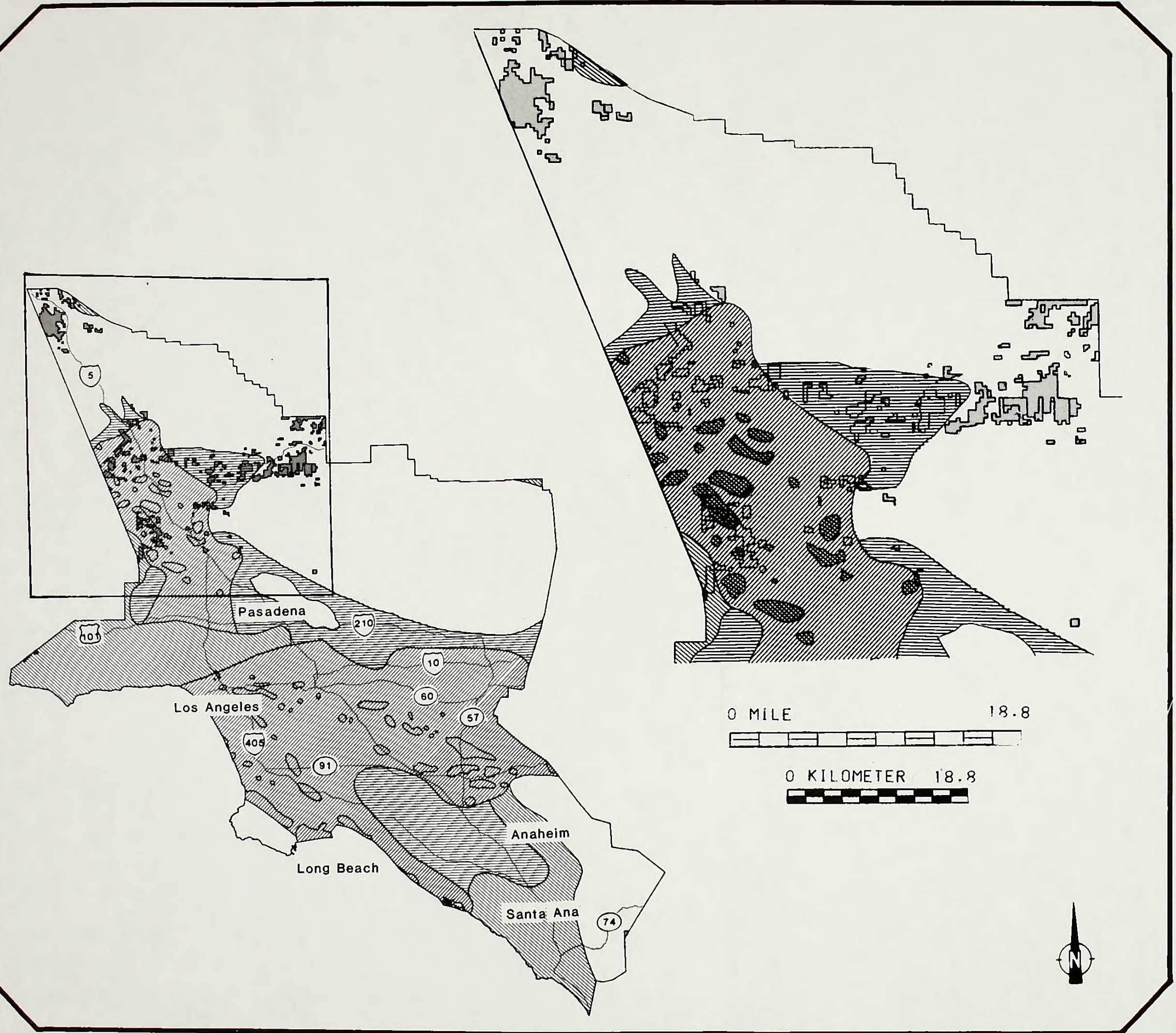
Throughout southern California there is potential for geothermal resources. The many fault zones within the management area act as conduits for migration of water from depth. Though these resources may not meet the criteria for commercial production of energy, there is a potential for direct heat application uses of these shallow depth hot waters.

### **Air Quality**

The management area is within the South Coast Air Basin, which has the worst air quality problem in the nation. Air pollution levels within the area have are high relative to federal and state of California standards set to protect public health. In 1987 the concentrations of four pollutants, ozone, carbon monoxide, nitrogen dioxide, and suspended particulates all exceeded established federal air quality standards (SCAQMD, 1989). The predominant sources of air pollution include automobile and industrial emissions.

Los Angeles-Orange  
County Management Area  
Classification of Potential  
for Oil & Gas Occurrences

-  High and Field Oil/Gas Potential
-  Moderate Oil/Gas Potential
-  Low Oil/Gas Potential
-  Existing Oil Fields
-  BLM/Public Lands (Including Split Estate Lands)







Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area

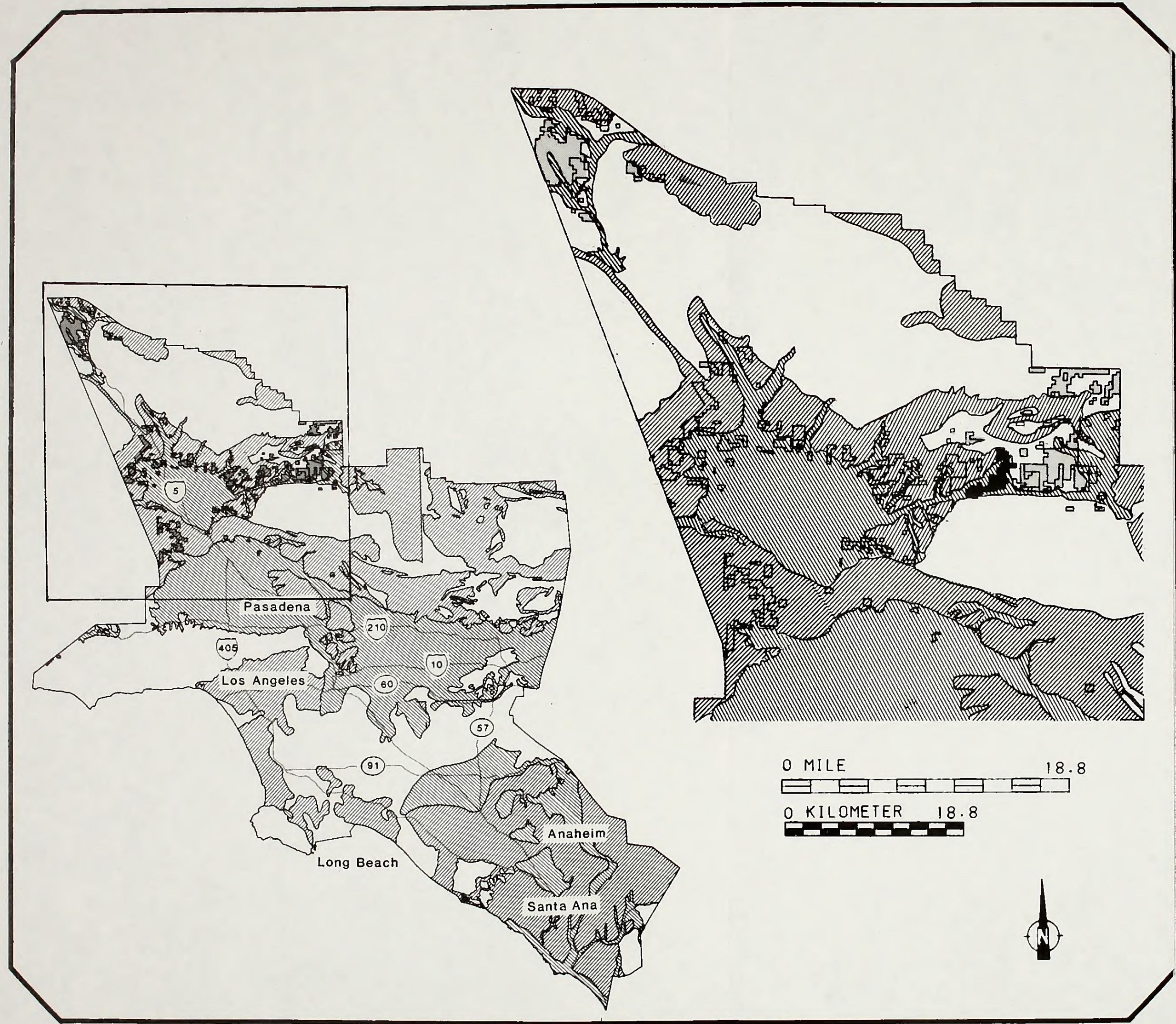


Los Angeles-Orange  
County Management Area

Areas Classified as Having  
High or Moderate Potential  
for Sand and Gravel  
Occurrences

-  High Sand and Gravel Potential
-  Moderate Sand and Gravel Potential
-  Potential Production Site
-  BLM/Public Lands (Including Split Estate Lands)

Bureau of Land Management  
California Desert District  
Palm Springs-South Coast  
Resource Area





## Soil and Water

There are no perennial streams crossing public land within the management area. Surface water resources on the public lands within the area are limited to intermittent streams and few springs. Four surface parcels and one split-estate parcels are either partially within or in close proximity to Castaic Reservoir. Almost all of both the BLM public lands and split-estate lands are within the drainage area of either the Santa Clara River or the Los Angeles River. The water quality of the both rivers is relatively poor, with high concentrations of total dissolved solids and nutrients.

Several different upland soils associations are present on the public lands within the management area. They are mostly on steep slopes and typically well drained to excessively drained with low inherent fertility.

## Socio-Economics

Currently about 10 million people live within the management area, and this is expected to increase to over 13 million by 2010 (SCAG, 1989). There are over 5 million jobs in a diverse and growing economy. Development within the vicinity of public land parcels is primarily residential, particularly in the Santa Clarita Valley area. It is estimated that Los Angeles County will gain 912,000 housing units by 2010.

## Cultural Resources

Cultural resources on BLM lands in Los Angeles and Orange Counties are little known. Less than 1% of the total acreage of these lands have been inventoried, including the split-estate lands. Most of the parcels within the management area are in steep and rugged areas, with low potential for the presence of archeological sites. A few archaeological sites are known to exist, including one on the small public parcel in Orange County. These relatively common sites are primarily agave roasting pits and/or areas of sparse lithic scatter. These sites probably fit into relatively late periods of prehistory. A few of the parcels have moderate to high potential for the occurrence of similar archaeological sites.

## Paleontological Resources

The potential for paleontological resources are little known on the lands managed by the BLM in Los Angeles and Orange Counties, including those on split-estate land. Both geologic maps, and a literature research by the Los Angeles County Museum of Natural History, indicate that the overall potential for fossil bearing stratigraphy is moderate. There are, however, some localities within this management area which may contain fossils from the Miocene Mint Canyon Formation, Miocene Ridge Route Formation, or the Quaternary alluvium.

### ARTS

The National Endowment for the Arts (NEA) is pleased to announce that it has awarded a total of \$100 million in grants to support the arts in 1998. This funding is distributed across various categories, including individual artists, performing arts organizations, and visual arts institutions. The grants are designed to support a wide range of artistic activities, from traditional theater and music to contemporary digital art and community-based projects. The NEA's commitment to the arts is a testament to the cultural richness and creative spirit of the United States.

### EDUCATION

The National Endowment for the Arts (NEA) is pleased to announce that it has awarded a total of \$50 million in grants to support arts education in 1998. This funding is distributed across various categories, including individual educators, arts organizations, and educational institutions. The grants are designed to support a wide range of educational activities, from traditional classroom instruction to innovative arts-based learning programs. The NEA's commitment to arts education is a testament to the importance of the arts in a child's development and the overall health of our nation's educational system.

### CONSERVATION

The National Endowment for the Arts (NEA) is pleased to announce that it has awarded a total of \$25 million in grants to support the conservation of cultural heritage in 1998. This funding is distributed across various categories, including individual conservators, museums, and historical sites. The grants are designed to support a wide range of conservation activities, from the restoration of ancient artifacts to the preservation of historic buildings and landscapes. The NEA's commitment to the conservation of cultural heritage is a testament to the value of our nation's history and the importance of preserving it for future generations.

### INTERNATIONAL

The National Endowment for the Arts (NEA) is pleased to announce that it has awarded a total of \$15 million in grants to support international arts programs in 1998. This funding is distributed across various categories, including individual artists, performing arts organizations, and cultural institutions. The grants are designed to support a wide range of international activities, from touring productions to cross-cultural collaborations. The NEA's commitment to international arts is a testament to the global nature of the arts and the importance of fostering international understanding and cooperation.



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# Chapter 4 - Environmental Consequences

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## Introduction

This chapter analyzes the environmental impacts of the Resource Management Plan (RMP) alternatives presented in Chapter 2. The alternatives present objectives and land use allocations but do not identify all of the site-specific actions which will be needed to implement the RMP. In order to adequately analyze the impacts, reasonably foreseeable development and levels of use were projected for each alternative and are presented in this chapter. The projections for each alternative include descriptions of each category of development or use which is expected to cause environmental impacts, such as residential development related to urban expansion, mineral development and recreation use. Since the alternatives describe overall management emphasis, and do not necessarily propose site specific projects or actions the consequences of the alternatives are often expressed in comparative, general terms. In most cases, subsequent environmental analysis will be required to implement resource management decisions. More detailed or site-specific studies will be conducted in compliance with the National Environmental Policy Act (NEPA) and its implementing regulations as the need arises.

The analysis focuses on specific impact topics which were selected for analysis. These topics, including the issues described in Chapter 1, relate to environmental resources and uses which would be affected by the alternatives. The impacts of each alternative are presented for the planning area as a whole. Impact summary tables at the end of Chapter 2 provide comparative analyses of the impacts of the alternatives within the individual management areas. The impacts described include analysis of direct, indirect and cumulative impacts of the alternatives. A summary table of cumulative impacts is presented in the Summary at the beginning of this document.

## Analysis Assumptions

In each of the management areas, impacts to open space values were analyzed. For purposes of this evaluation, open space values were considered to be amenity values associated with the natural character and condition of the land in relation to its surroundings. Open space may simply provide scenic viewsheds or vistas. It may support other activities or provide habitat for some sensitive species, but its primary value lies in its naturalness and in the contrast it provides with development and urbanization. The analysis of the open space values was based on the following considerations:

Open space is a resource that increases in value and importance as its quantity and accessibility decrease.

The location of the parcels in relation to surrounding land uses affects open space values. The loss of open space that is close to, surrounded by, or in the path of development may be considered more important than a similar loss far from development.

The visual resource management elements of scenic quality, sensitivity and distance zones were used as gauges of open space value.

The specific concerns that surfaced from other government agencies and the public during the study were factors folded into the final determinations.

Integration of these elements resulted in the classification of each parcel into one of three open space value categories: Class 1 has high values; Class 2 has medium values and; Class 3 has low values.

The following assumptions were made in the analysis of impacts to wildlife and vegetation.

Three categories of lands actions are considered in the analysis of impacts on each species and plant community. These are disposal, protected transfer and retention. The disposal of BLM-administered lands includes the direct sale or the exchange of those lands to the private sector. Protected transfer includes the conveyance or leasing of BLM-administered lands under the Recreation and Public Purposes (R&PP) Act, or the transfer of BLM lands to another government agency (such as the U.S. Forest Service), or the transfer of BLM lands to a private land steward such as The Nature Conservancy; in all of these cases, development is expected to be minimal. Retained lands would remain under BLM-administration.

Parcels containing at least 600 acres were considered as the minimum acreage threshold for potential mule deer habitat.

Minimum acreage figures were established for some habitat types, as a threshold below which the habitat was not considered to be manageable. Coastal sage scrub habitat was considered manageable if it occurred in blocks of at least 30 acres. Riparian habitat segments were considered manageable if they occurred in lengths of at least 0.5 miles.

Riparian habitat segments were classified according to the most dominant community present within the riparian system.

## Impact Topics Selected for Detailed Analysis

### Impacts to Wildlife

**Sensitive Species.** Eighty-four animal species of special status were considered for analysis in the planning area. Thirteen of these species have occurrence data records within three miles of BLM-administered lands, and six special status species have been recorded on BLM-administered parcels (See Appendix B). The various alternatives may have different impacts on the sensitive species involved. The significance of these positive and/or negative impacts is a topic for analysis in the Environmental Impact Statement (EIS).

**Game Species.** The planning area contains important year-long habitat for game species such as mule deer and quail. This habitat and its associated wildlife species could be affected differently by uses and actions considered in the various alternatives. The analysis of impacts on the area's upland game species and their habitat is a topic for analysis in the EIS.

**Important Wildlife Habitat Types.** Two habitat types which provide particularly important resources for many species of wildlife were identified within the planning area. These habitat types, riparian and coastal sage scrub communities, are of special concern because they are being destroyed or modified at a rapid pace and much of their historic distribution in the planning area has already been lost. Several wildlife species, which are listed as threatened or endangered or are candidates for listing, are dependent on these habitats for survival. These important wildlife habitat types could be impacted either negatively or positively by the various alternatives. The analysis of impacts to important wildlife habitat types in the area is a topic for analysis in the EIS.

### Impacts to Vegetation

**Sensitive Species.** Fifty-six plant species identified as sensitive occur or have a high potential for occurring on the public lands within the South Coast Planning Area. (Sensitive plant species are those listed or proposed as candidates for listing by the U.S. Fish and Wildlife Service (USF&WS) as endangered or threatened, listed by the California Department of Fish and Game (CDF&G) as rare, threatened or endangered, or otherwise recommended for special consideration). Because some of the decisions of the RMP may impact these species and/or their habitat, these impacts are a topic of analysis.

**Sensitive Plant Communities.** Ten sensitive plant communities have been identified on public lands within the planning area. These plant communities, sensitive by virtue of their scarcity and/or susceptibility to disturbance, could be impacted by uses and actions that would occur under the various alternatives. The analysis of impacts to these plant communities is a topic to be addressed in the EIS.

### Impacts to Open Space Values

Open space is a resource that is easy to recognize, but difficult to define. It can be appreciated when viewed from a distance, when visited or when passing through at high speed on a busy highway. Parcels with open space values vary in size from less than 1 acre to thousands of acres, and may be located in or near urban area or surrounded by vast tracts of undeveloped land. Open space is being depleted in the planning area, primarily due to urban expansion. Public lands are tantamount to open space in this region. Retention of these lands under federal management is one of the primary methods of maintaining areas with open space values. The management of each site under a multiple-use concept provides opportunities for resource utilization while maintaining the land in a relatively natural condition, open for the public to use. Each of the alternatives proposed in this EIS will impact the open space resource to some degree; therefore, open space was selected as a topic for detailed analysis.

### Impacts to Recreation Use

A variety of recreational uses take place on public lands in the planning area. These include hiking, equestrian use, hunting and shooting, camping, nature study, photography and off-highway vehicle use. Some decisions and actions considered in various RMP alternatives could enhance opportunities for these recreational uses, while some could restrict, or even eliminate specific uses in certain areas. The significance of these impacts on recreation use is a topic for analysis in the EIS.

### Impacts to Mineral Development

The planning area contains several valuable mineral resources. Known oil and gas reserves and sand and gravel deposits occur on the public lands. There is a high demand for sand and gravel needed as aggregate material for construction. In addition to known reserves, there are areas with potential for the occurrence of a wide variety of mineral resources. Under the alternatives considered in the RMP, mineral exploration and development could be affected to varying degrees. The significance of these impacts to mineral development in the area is a topic for analysis in the EIS.

### Impacts to Paleontologic Resources

The Badlands of north central Riverside County hold sedimentary deposits dating from the upper Miocene, which contain significant quantities of large vertebrates including the horse, camel, and rhinoceros (Frick 1921). Also in Riverside County, on the southwest edge of the Poppet Flat parcel,

is part of the Soboba Formation, which holds at least 80 different species of flora fossils (Axelrod 1966). Several areas in Los Angeles County are also rich in fossils of both marine and land vertebrates and there is potential for their occurrence on public lands. As a result of several of the alternatives considered in this RMP, significant paleontological resources would be impacted. Analysis of impacts to paleontological resources, therefore, is a topic for analysis in the EIS.

### **Impacts to Kuchamaa (Native American Religious Values)**

Kuchamaa (Tecate Peak) and Little Tecate Peak are of significant religious value to Native Americans. These mountains have served as places to hold sacred dances, ceremonies, ancient sacramental acts, and to receive healing and spiritual cleansing. Today these mountains also act as a link with the ethnic past and religious heritage of the Kumeyaay people. Parallels have been drawn comparing the Native American view of Kuchamaa to the Christian respect for a cathedral, as both represent places of great religious importance. Under the alternatives considered in the RMP, these values would be impacted either positively or negatively. Impacts to the Native American values associated with Kuchamaa, therefore, is a topic for analysis in the EIS .

### **Impacts to Watershed and Soils (Beauty Mountain Management Area)**

The Beauty Mountain Management Area comprises one of the largest watershed systems found on public land in the South Coast Planning Area. This watershed includes the headwaters for two major river drainages: the San Luis Rey River to the south and the Temecula River to the north. It also provides recharge to the alluvial groundwater basins of the Tule, Terwillger, Chihuahua, and Oak Grove Valleys. A large part of this watershed is characterized by steep canyons and erodible soils of the Tollhouse-Sheephead-Crafton association. Some decisions considered in the various alternatives of the RMP would affect these watershed and soil resources to some degree. These two resources were therefore selected as topics for analysis in the Beauty Mountain Management Area.

## **Impact Topics Considered but Eliminated from Detailed Analysis**

### **Impacts to Air Quality**

The planning area is located partially within the South Coast Air Basin and partially within the San Diego Air Basin. Impacts to air quality are a major concern within these areas due to existing nonattainment of National Ambient Air Quality Standards for several pollutants. Therefore, air quality was considered as an environmental topic to be addressed. The main sources of air pollution from the public lands are generation of dust and exhaust emissions from activities such as off-road vehicle use and mineral exploration and development. In addition, the smoke generated from prescribed burning affects air quality. This results in airborne particulate matter and temporary concentrations of exhaust fumes. Overall use of public land under projections of foreseeable use would not have a significant impact on the air quality of the South Coast Air Basin as a whole. In addition, future site specific management actions will be conducted in such a manner as to conform to the South Coast Air Quality Management District's (SCAQMD) and the San Diego Air Pollution Control District's (SDAPCD) air quality objectives and attainments strategies (see Chapter 2). For example, prescribed burns would be conducted only on approved burn days and, if needed, proposals would be conditioned on obtaining a permit from either SCAQMD or SDAPCD.

### Impacts to Soils

Soils were considered as an environmental topic to be addressed in the EIS. They were selected for analysis, however, only in the Beauty Mountain Management Area (See Impacts to Watershed and Soils, page 4-3). There are some "gabbro" type soils which are associated with several special status plant species and are addressed as part of the vegetation topic. Soils high in productivity, or prime or unique farmland soils do not occur on public lands within the planning area. The main impact to soil on the public lands is accelerated soil erosion caused by surface disturbance and vegetation manipulation. Site-specific measures for reducing soil erosion, if needed, would be implemented under all alternatives (see Chapter 2) as part of the site-specific evaluation of management actions. Under projections of foreseeable surface use for each of the alternatives considered, however only minor increases in soil erosion would occur.

### Impacts to Water Quality

Water quality was considered as a topic to be addressed in the EIS. Water quality management objectives have been established for individual water basins by each Regional Water Quality Control Board under authority of the Federal and State Water Quality Acts. The main potential for water pollution from public lands is from non-point sources which are addressed in Section 208 of the Federal Water Pollution Control Act and the State's Nonpoint Source Program. The 208 plan for public lands in California established guidelines for identification and reduction of water quality problems through development and implementation of Best Management Practices (BMPs). The BMPs would be developed in coordination with the responsible Regional Board. Under projections of foreseeable use for all of the alternatives considered, impacts to water quality would be minimal.

### Impacts to Cultural Resources

Based on review of existing information, no significant cultural resources have been identified within the planning area that would be significantly impacted by the decisions of any of the various alternatives. Specific decisions which might affect cultural resources will be subject to the provisions of the National Historic Preservation Act as set forth in 36 CFR 800, and programmatic memoranda of agreement between the California BLM, the Advisory Council on Historic Preservation and the California State Historic Preservation Officer. Full compliance with federal law and regulation will be met prior to any decision being made which would affect any cultural resource with potential for inclusion on the National Register of Historic Places. Therefore, impacts to cultural resources will not be further addressed in this EIS.

### Impacts to Wild and Scenic Values of the Santa Margarita River

An environmental topic dealing with the wild and scenic values of the Santa Margarita River was considered. Since the segments of the river crossing public land have been found to be eligible for inclusion in the National Wild and Scenic Rivers (NWSR) system, interim measures (see Appendix E) to protect the wild and scenic values will be in effect under all of the alternatives considered, and no significant impacts would occur. Therefore the topic is not further analyzed in the EIS. Further analysis will occur as part of the suitability study to be completed following approval of the RMP.

### Impacts to Right-of-Way Holders

Evaluation of impacts to holders of existing rights-of-way on public lands was considered as an environmental topic to be addressed in the EIS. Parcels containing major utility lines and transportation routes are identified in Appendix I. Some of these parcels and other parcels with smaller rights-of-way are identified for disposal in the plan alternatives. Disruption of transportation

and utility services, however, would not be affected. Individual rights-of-way would be protected as valid existing rights in any disposal action. Right-of-way holders would be affected by the necessity of dealing with new land owners, but this is not considered an environmental topic to be addressed as a major concern from an overall socio-economic standpoint.

### **Impacts to Livestock Grazing Operations**

Under alternatives considered in the RMP, some of the smaller livestock grazing leases and allotments would be eliminated as a result of land tenure adjustments. Impacts, however, would be considered minor, as they are limited to allotments with few AUMs, where there is no dependency on public land resources to provide a significant portion of the livelihood of the existing operators.

### **Impacts to Socio-Economic Conditions**

Evaluation of impacts to overall socio-economic conditions within the planning area was considered as an environmental topic to be addressed in the EIS. None of the RMP alternatives considered, however, would have a significant impact on the socio-economic conditions of the region. Some aspects socio-economic conditions are addressed as part of the other topics which are analyzed in detail such as open space, recreation use, mineral development and Kuchamaa (Native American religious values). Overall evaluation of impacts to regional socio-economic conditions, however, is not addressed as an environmental topic to be addressed in the EIS.

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### Reasonably Foreseeable Development

#### Lands Actions

Due to the pressures of population growth, the South Coast region is expected to experience continued urban expansion, with development expanding into new areas. Three of the management areas within the planning area are experiencing rapid growth: San Diego County, Riverside-San Bernardino County and Los Angeles-Orange County. It is estimated that 2.4 million people currently reside in the San Diego region. Since the 1980 census there has been a regional gain in population of almost 30%, and a baseline projection for the year 2010 estimates that the San Diego region will reach a population of 3.1 million. In the southern California region Riverside County is the fastest growing county; the population was 757,000 in 1984 and is increasing on the average of 4.6% each year. A baseline projection, for the year 2010, estimates that Riverside County will have a population of almost 2.0 million residents. The potential for urbanization and a housing boom is certain. Housing is expected to increase by 566,000 units by the year 2010. Currently about 10 million people live within the Los Angeles-Orange County area, and this is expected to increase to over 13 million by 2010. It is estimated that Los Angeles County will gain 912,000 housing units by 2010.

The predominant land use development surrounding public land parcels is for residential housing and this trend is expected to continue.

Under this alternative a total of 52,270 acres would be available for disposal through exchange or sale. Reasonably foreseeable development following transfer from federal ownership is that 68% (35,459 acres) of these lands would be developed for residential use. Such development would take place in accordance with local government land use plans, with an expected density of one dwelling unit or more per forty acres. For 32% (16,811 acres) of the lands, however, disposal is conditioned either on protecting sensitive resources or extensive development is not expected even if the lands are transferred from federal ownership. The expectations for these lands are described below:

1. A total of 23 parcels (3,820 acres) are available for exchange only for the purpose of acquiring 3,820 acres of public lands within the Steele Peak Stephens' kangaroo rat (SKR) Reserve Study Area. These 23 parcels include 12 parcels (1,862 acres) within SKR Reserve Study Areas and 11 parcels (1,958 acres) with documented SKR presence. These exchanges would consolidate public ownership in the Steele Peak Reserve area around four parcels (1,540 acres) of BLM-administered land. It is also anticipated that some of the other SKR Reserve Study Areas which contain the 12 parcels (1,862 acres) of BLM public land will be selected as SKR Reserves. It is expected that BLM parcels within these selected SKR Reserves will be exchanged to the Riverside County Habitat Management Agency for the BLM public land acquisitions at Steele Peak.
2. One 200-acre parcel, where the federally endangered Least Bell's Vireo has been recorded, is identified for disposal only if the habitat would be protected.
3. One 50-acre parcel, identified as having potential for occurrence of the federally endangered slender-horned spineflower, is available for disposal only if surveys reveal that slender-horned spineflower plants are not present.

4. There are 12 parcels with 12,055 acres in San Diego County which are currently leased by local government agencies under the Recreation and Public Purpose (R&PP) Act, or are covered by existing lease applications. It is expected that these lands will be used in accordance with development plans which primarily call for the construction of recreation staging areas and trails for non-motorized use.
5. Five of the parcels near Castaic Lake in Los Angeles County, with a total of 686 acres, are expected to be transferred to the California State Department of Water Resources under the R&PP Act. Development of these parcels will be limited to the provision of facilities for recreational use.

Acquisition of public lands under this alternative is expected to be limited to inholdings in the vicinity of Otay and Hauser Mountains (approximately 1,300 acres) in San Diego County and the Beauty Mountain Area (approximately 1,300 acres), as well as for consolidation of lands in the Steele Peak area in Riverside County (3,820 acres).

### **Recreation Actions**

OHV designations on most of the lands would limit motorized vehicle use to existing routes of travel. As a result of this alternative, primarily the disposal of parcels from federal ownership, the total length of existing routes on BLM public lands would be reduced from 260 to 124 miles.

No development of recreational facilities is expected to take place under this alternative. Acquisition of public access is expected to be limited to only a few large blocks of land such as Beauty Mountain, Otay Mountain and Hauser Mountain.

Few or no visitor services will be provided.

Recreation use levels will increase from the existing 37,000 to 54,000 VUD. This is due to increases in use on the parcels retained in federal ownership. The higher levels of use will result from population growth and urban expansion.

### **Mineral Development**

**Sand and Gravel Development.** Due to continued growth and urban expansion in the planning area, there will be an increasing demand for sand and gravel for construction material. As existing sources are depleted, new sources will be needed.

Development of sand and gravel resources in Los Angeles County is expected to occur on split-estate lands in the Agua Dulce vicinity, within an area identified by the California Division of Mines and Geology as containing significant construction aggregate material resources (see Map 3-9). It is expected that the existing sale of 5.6 million tons of sand and gravel at this location will result in operations which will disturb 200 to 400 acres over the next 20 years. It is also expected that there will be one additional material sale within this area, resulting in operations with 100 to 200 acres of disturbance including roads, pits and processing areas.

Reasonably foreseeable development for sand and gravel aggregate resources in Riverside County includes an operation on the parcel east of Interstate 15 just south of Temecula (see Map 3-4) with 80 to 120 acres of surface mining disturbance, 3 to 6 miles of road construction, and an additional 10 to 20 acres for work/processing areas. (This parcel is identified suitable for disposal, but the projected mineral development would occur regardless of eventual disposition of surface and/or mineral interests). In addition, development of a split-estate parcel nine miles east of Temecula (see Map 3-4) is expected to result in 40 to 60 acres of surface disturbance, including one-half to 1 mile of road construction.



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It is also expected that exploration activities for sand and gravel on public lands throughout the planning area will continue due to growing demand for aggregate resources. Up to two acres of disturbance per year is expected from exploration in areas with moderate to high potential for sand and gravel resources (see Maps 3-1, 3-4 and 3-9). Depending on the success of exploratory efforts and environmental constraints, it is possible that four to five operations could be developed on public lands in these areas within the ten year period following approval of the RMP. Surface disturbance would involve 20 to 30 acres for each operation.

**Oil and Gas Development.** Reasonably foreseeable development for oil and gas is that 1,500 wells will be drilled in the South Coast Planning Area in the ten year period following approval of the RMP. It is expected that 100 of these will likely be on BLM-administered public lands. The Los Angeles Basin will continue to be the major oil and gas producing area. The locations of future activity will generally be near the historically active areas. Other areas will be tested, however, especially if the economic incentives exceed precedent. Of the expected 1500 wells, 300 would be exploratory to some degree, and 20 of these exploratory wells are expected to be on BLM administered public lands. Exploratory drilling will most probably be conducted in high potential areas, although some exploration is expected to occur in the moderate potential areas, and limited activity will occur in areas with low potential. Non-exploratory drilling will be conducted within existing fields. Most existing fields and most areas of high potential are within the Los Angeles-Orange County Management Area. Of the wells expected to be drilled on BLM- administered lands, all of the non-exploratory wells will be drilled within existing fields in Los Angeles County, and most of the 20 exploratory wells will likely be drilled within the high or moderate potential areas (see Map 3-8). Some of the exploratory wells to be drilled on BLM-administered lands, however, are expected to be on lands with oil and gas potential in Riverside and San Bernardino Counties (see Map 2-5). Based on the size of the area with oil and gas potential relative to that of the planning area as whole, it is expected that three of exploratory wells will be drilled on BLM-administered lands in the Riverside-San Bernardino County Management Area. There is also a remote possibility that one or two of the wells would be drilled outside of areas with known oil and gas potential. The application of stipulations for the protection of sensitive species will control the locations of surface disturbance, but is not expected to alter the amount of projected drilling activity.

The average total acreage utilized by exploratory drilling operations will be five acres per well. The disturbance for each well pad will be four acres, although new disturbance will average only two acres since many drilling pads will utilize previously disturbed areas. The average disturbance per exploratory well for access roads will be one acre, including a 40-foot width for roadway and ditches and an average length of 0.2 miles. Non-exploratory drilling activity will, for the most part, utilize existing disturbed areas. The average total acreage utilized per non-exploratory well will be two acres. New disturbance for non-exploratory drilling will average 0.5 acres per well. The total acreage of new disturbance from drilling activity on BLM-administered public land is expected to be 100 acres, with exploratory drilling contributing 60 acres of disturbance, and non-exploratory drilling contributing 40 acres.

It is expected that 55 of the 80 non-exploratory wells and eight of the 20 exploratory wells would be successfully completed as producing wells, and that the disturbed areas associated with non-producing wells will either be reclaimed through surface contouring and revegetation, or committed to other surface uses. Surface disturbance associated with producing wells will remain for the life of production, which averages 20 years.

It is expected that some of the disturbance associated with non-exploratory wells in existing fields will be on land and mineral interests acquired by the federal government which have not yet been reported to the BLM. Most of the tracts are probably small, on the order of ten acres, although some may reach hundreds of acres. As these tracts are documented, they will be subject to leasing or unitization at the estimated rate of two per year. Up to 20 wells could be drilled on these lands in

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**Table 4.1 Summary of Expected Surface Disturbance on Public Lands from Oil and Gas Drilling**

	Exploratory Wells	Non-Exploratory Wells	Total
Utilization of Previously Disturbed Areas (acres)	40	120	160
New Disturbance (acres)	60	40	100
<b>TOTAL</b>	<b>100</b>	<b>160</b>	<b>260</b>

the next 10 years. Ten of these wells are expected to be on lands under the jurisdiction of other federal surface-managing agencies. The other 10 wells (included in the 80 non-exploratory wells identified above) are expected to be on BLM-administered mineral estate lands.

**Locatable Mineral Development.** No development of locatable mineral resources has occurred on BLM-administered public lands within the planning area in recent years. However, exploration activities as well as some development is expected over the next ten years.

In the San Diego County Management Area, it is expected that exploration for locatable minerals (i.e. gold and dimension stone) will occur in areas with high potential for these resources (see Map 3-2), disturbing five to ten acres for access construction and test drilling. It is expected that mining of dimension stone in these areas will disturb 10 to 20 acres.

In the Riverside-San Bernardino County Management Area, exploration for locatable minerals is expected in areas with high potential for gold (see Map 3-5). Approximately six acres of disturbance per year for exploration is expected, but no development is anticipated, and disturbed areas will be reclaimed through revegetation. As land tenure adjustments are completed, exploration activity will be displaced from lands transferred out of federal ownership to lands acquired within the Steele Peak area.

The Beauty Mountain Management Area contains known deposits of tungsten and very minor amounts of gold. It is assumed that mining exploration and development will occur in areas with high potential for tungsten (see Map 3-6). If mining does occur, it is expected that approximately 200 acres will be disturbed through stripping of the surface to access the mineral deposit. In addition, approximately one mile of an existing route will be upgraded and maintained as a service road, and another one mile of road will be constructed to provide access.

It is anticipated that less than ten acres of disturbance for exploration activities will occur on BLM public lands in the Los Angeles-Orange County Management Area over the next 10 to 20 years. No actual mining operations for locatable mineral commodities is expected.

### **Vegetation Management Actions**

Under this alternative 4,500 acres of controlled burns would be conducted for livestock grazing management over 10 years. As prescribed and analyzed in the Otay Grazing EIS (BLM 1982) and the Western Counties Wilderness Study Project (BLM 1987), the treatments would consist of 1,000 acres in the Clover Flat Allotment (No. 07012), 1,000 acres in the Hauser Mountain Allotment (No. 07024), 1,000 acres in the Otay Mountain Allotment (No. 07035), 500 acres in the Potrero Allotment (No. 07046) and 1,000 acres in the Beauty Mountain Allotment (No. 06009). It is assumed that there will be a five-year forage viability period after burning, with 50% of the additional forage being available and used by wildlife. All prescribed burns would follow the project design restrictions outlined in the Otay Grazing EIS. These restrictions include:

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- Prescribed burns will be planned under constraints that will assure minimum damage to plant cover, soil, and riparian systems.
- Prescribed burns will be implemented only after an approved burn plan has been developed.
- Burns for improving wildlife habitat could be conducted on either potentially suitable or unsuitable sites for livestock.
- Prescribed burns for increasing livestock forage production will be carried out only on sites suitable for type conversion as identified by the Soil Conservation Service.
- Prescribed burning shall take place only on days designated as a "burn days" by the South Coast Air Quality Management District (SCAQMD) and/or the San Diego Air Pollution Control District (SDAPCD).

Refer to Appendix G, Table G-2, for a complete list of restrictions.

## **Environmental Consequences**

### **Impacts to Wildlife**

#### **Federally Listed or Proposed Species**

**Unarmored Three-spined Stickleback.** Previously more widespread in southern California (Miller and Hubs 1969), this fish is now confined to the Santa Clara River system. Information provided by the Unarmored Three-spined Stickleback Recovery Team (n.d.) stated that in 1917 this subspecies of the three-spined stickleback was reported to be abundant in the Los Angeles, San Gabriel and Santa Ana River systems of the Los Angeles Basin. Today these rivers have, for the most part, been reduced to concrete-lined drains, and the last self-sustaining populations of this stickleback are confined to San Antonio Creek on Vandenberg Air Force Base, and to Soledad Canyon of the Santa Clara River and a few of its small tributaries. Principal impacts leading to the endangerment of this species have been urbanization and agricultural development. The survival of the unarmored three-spined stickleback is threatened by (a) agricultural, industrial, and municipal water pollution, (b) channelization and the other habitat modifications associated with urbanization, (c) hybridization, (d) the introduction of competing and predatory species, and (e) and stream flow alterations caused by water diversions and ground water pumping.

This endangered fish does not occur on lands administered by the BLM. Its range within the Santa Clara River is, however, adjacent to several small public land parcels, and is downstream of 2,819 acres of public land and 21,806 acres of subsurface mineral estate with high to medium potential for aggregate material extraction and/or oil and gas development. The reasonably foreseeable development of these resources over the next 20 years is expected to result in the disturbance of up to 600 acres for sand and gravel extraction and the development of 100 oil and gas wells. This puts the species in a position of potentially being affected from secondary impacts related to oil spills and sand and gravel extraction, including increased sediment loads.

**Conclusion:** Under this alternative, cumulative impacts would be negative, but not significant, to unarmored three-spine stickleback. State requirements, BLM standard stipulations and a controlled surface occupancy stipulation on upstream areas would control the indirect impacts to unarmored three-spined stickleback in the typical mineral development scenario.

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**California Condor.** The last wild condor was captured and added to the captive breeding population in April of 1987 (California Department of Fish and Game 1988). Historically, the species occurred throughout most of California. Increased urbanization and agricultural development, and the reduction of widespread range cattle operations are thought to be major factors leading to the loss of a viable wild population. Based on studies of released Andean Condors by the USF&WS, probable condor habitat was designated as core use areas, main range limits, or areas of expected extension of condor range. Core use areas were defined as the areas where condors concentrate their activities such as feeding, roosting, and the majority of their flight activity. The main range limits constitute the area where the Andean Condors spent ninety percent of their time. The expected extension of condor range is based on areas known to have previously been used by wild California Condors and that still appear to retain suitable habitat constituents for condors. The USF&WS has identified over 900,000 acres of probable condor habitat within the planning area, including 100,000 acres of core use area. A total of 780 acres of BLM-administered lands are located within the core use area and an additional 4,826 acres within the area identified as the limit of the condors' main range. Federal and state lands constitute a significant proportion of the identified condor habitat, including 51% of the core habitat and 73% of all condor habitat categories. Of the federal and state owned condor habitat, the National Forests manage 99% of the core area and 95% of all condor habitat categories. In this alternative, the disposal (through sale or exchange) of 3,596 acres of BLM-administered land would include the disposal of 442 acres of the 780 acres of condor core range administered by BLM. An additional 3,073 acres within the area identified as the limit of the condors' main range would be subject to disposal and would be negatively impacted by expected low-density development (one dwelling unit per 40 acres).

The development of sand and gravel resources on split-estate land in the planning area is expected to impact up to 600 acres of potential habitat (habitat outside of the core area) of the California Condor. At present, 18% of the identified condor habitat within the planning area has been classified as having a moderate to high potential for oil and gas development. Oil and gas development on public lands is expected to create 100 acres of new surface disturbance in association with well drilling and ancillary facilities. Approximately 50% of the drilling activity would occur in existing oil fields in the area delineated as condor core habitat.

Conclusion: Impacts to condors from the disposal of BLM-administered land to the private sector as proposed in this alternative are expected to be negative but not significant due to: (a) the small size of the parcels identified for disposal, (b) the extremely small acreage involved, relative to the condor's identified core and home range area, and (c) the limited opportunity for residential development on most of the parcels due to topography. Of the more than 900,000 acres of identified California Condor habitat within the planning area, a maximum of 700 acres would be impacted through the development of mineral resources on split-estate lands. Of this 700 acres, only 50 acres would occur within the area identified as core habitat and this is within an already existing oil field. Consequently, cumulative impacts to California Condors would be negative but not significant.

**Stephens' Kangaroo Rat.** The principal threat to the continued existence of the Stephens' kangaroo rat (SKR) is the historic and recent loss of habitat (RECON 1990). At present the species is estimated to occupy only 22,000 acres within its historic range. Of this existing occupied habitat, 16,052 acres are within ten areas identified as reserve study areas in the Short-term Habitat Conservation Plan (RECON 1990). In this alternative, twenty-three parcels would be available for exchange only for the purpose of acquiring up to 3,820 acres within the proposed Steele Peak Reserve. These include 12 parcels (1,862 acres) within other reserve study areas and 11 other parcels (1,958 acres) containing 296 acres of occupied habitat (Montgomery 1989, RECON 1990).

It is expected that the 11 BLM parcels with SKR habitat outside of reserve study areas would be surrounded by housing developments within the next 15 years. SKR habitat on these parcels would become further fragmented, with the associated SKR populations becoming increasingly isolated. The exchanges proposed in this alternative would consolidate public ownership surrounding four

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existing parcels (1,540 acres) of BLM public land within the proposed Steele Peak Reserve. If accomplished, these exchanges would consolidate 38% of the 9,600 acres identified for acquisition in the Steele Peak Reserve by the Habitat Conservation Plan. This land tenure adjustment would provide habitat protection for the core portion of this proposed SKR reserve. At the level of BLM involvement proposed under this alternative, however, 62% of the Steele Peak Reserve would not be acquired unless alternative funding was identified.

The 12 BLM parcels (1,862) within other reserve study areas, would be exchanged for land within the Steele Peak Reserve. It is expected that these parcels would be acquired by another government agency or a group acting on behalf of the reserve system and incorporated into those reserve study areas that are selected as final SKR reserves. Included within these parcels are 447 acres of occupied SKR habitat and 7 acres identified as potential SKR habitat. Any BLM-administered parcels within reserve study areas that are not selected as final SKR reserves would be available for exchange to consolidate BLM land within the Steele Peak Reserve.

OHV use of existing routes on lands retained by the BLM will increase with encroaching development and population growth. This increased use, coupled with the inability of law enforcement to provide continual patrol in a given area, would result in an increase in cross-county use. Impacts to SKR would occur through direct mortality of individuals from burrow collapse and indirect impacts resulting from habitat degradation. Based on the analysis of 760 acres of occupied habitat outside of SKR Reserve Study Areas, less than six acres of new disturbance is expected over 20 years, resulting in the death of less than 12 animals (Hicks and Cooperrider 1977, Montgomery 1989, and O'Farrell and Uptain 1989, RECON 1990). Conversely, this level of OHV activity is expected to enhance opportunities for SKR movement/pioneering activity by increasing the number of dirt roads linking SKR habitats to pockets of potential habitat.

**Conclusion:** The BLM would pursue the acquisition of 3,820 acres lands within the Steele Peak Reserve (40 percent of the acquisition needs projected for Steele Peak Reserve). It is expected that BLM lands in other reserve study areas would be acquired for inclusion in the reserve system. The 3,517 acres of occupied and potential habitat on BLM parcels outside of reserve study areas would be sold or exchanged. These parcels, however, would be exchanged for land within the Steele Peak Reserve. Habitat values on acquired lands are expected to be similar, and no net loss of Stephens' kangaroo rat habitat under BLM administration is expected. The anticipated increase of OHV use on parcels remaining in public ownership would have some minor negative short-term impacts on SKR through direct mortality, but the long-term impacts would not be significant. Cumulative impacts to Stephens' kangaroo rat would be slightly positive under this alternative.

**Least Bell's Vireo.** Historically, the Least Bell's Vireo (LBV) was distributed throughout the low elevation river systems of California and Baja California, Mexico. As a result of habitat loss and nest parasitism, this bird species has been extirpated from much of its former range. By 1989 the population was down to an estimated 300 breeding pairs, with the majority of pairs concentrated in San Diego, Santa Barbara, and Riverside Counties. Because of the widespread habitat losses, remaining Least Bell's Vireos occur in small, widely dispersed subpopulations. According to Franzreb (1989), the six largest of these subpopulations represent approximately 90% of the total number of breeding pairs. These major subpopulations occur in the Santa Margarita River (98 pairs; 35% of all LBV breeding pairs), Sweetwater River (60 pairs or 21%), San Luis Rey (33 pairs or 12%), San Diego River (21 pairs or 7%), Prado Basin-Santa Ana River (20 pairs or 7%), and the Santa Ynez River-Gibraltar Reservoir (20 pairs or 7%).

Least Bell's Vireos have been recorded on only one parcel (190-321) administered by the BLM within the planning area. Several pairs were observed in April of 1988 on this parcel, in the Warm Springs drainage, a tributary of Murrieta Creek (G. Bell pers. communication). This parcel is isolated by development from the closest major subpopulation, located in the Santa Margarita River and is slated for protective transfer in this alternative.

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Eighteen other BLM parcels contain 12.9 miles of riparian habitat with well-developed understories (shrub willows were used as an indicator species) and are considered as potential habitat. In this alternative, two of these parcels containing 3.3 miles of potential habitat around Canyon Lake would be exchanged to consolidate land within the Steele Peak Reserve. Four other parcels (containing 1.1 miles of potential habitat) would be sold, including 0.6 miles of well-developed riparian habitat located three miles north of the Santa Margarita River and 0.3 miles of well-developed riparian habitat in Rainbow Creek, within the Santa Margarita drainage. Two parcels, containing 1.3 miles of potential habitat, would be available for R&PP lease. One of these parcels, which supports one mile of shrubby riparian habitat, is located within a quarter of a mile of Least Bell's Vireo sightings on the Santa Ysabel Creek. The riparian habitat on these two parcels is not expected to be altered under R&PP leases. Ten parcels, with 7.4 miles of potential habitat would be retained in this alternative. Parcels being retained include 1.4 miles along the Santa Margarita River and 0.9 miles in Fern Creek, a tributary of the Santa Margarita River.

**Conclusion:** The impacts of this alternative on potential habitat for Least Bell's Vireo would be negative. Impacts would result from the sale or exchange of 4.4 miles of potential habitat (34% of the potential habitat present on BLM-administered land) and the eventual development of at least some of that land. Ten percent of the potential habitat on BLM land would be available for R&PP lease. A total of 56% of the potential habitat on public land would be retained, including two of the parcels most likely to support Least Bell's Vireo (one along Fern Creek and another along the Santa Margarita River). The cumulative impacts, however, are not expected to be regionally significant to the species. The majority of the suitable habitat administered by the BLM is on the fringes or outside of areas currently supporting the largest breeding populations. The relatively small riparian segments on BLM lands probably represent potential breeding areas, currently unoccupied by this shrinking population.

#### **Candidate Species**

**Wright's Checkerspot Butterfly.** The only known population of this butterfly occurs in the vicinity of Oak Mountain (Ballmer, pers. comm.). This species of butterfly is reported to be associated with clay soils and a host plant, Dot-seed plantain (*Plantago erecta*).

The disposal and eventual development of habitat, in conjunction with an expected increase in OHV use in the Oak Mountain area, would result in the destruction of this butterfly's host plant species and the disruption of areas where the larval form of the species escapes to avoid desiccation during drought periods. These actions would result in a reduction in the population leading to the possible extinction of this species within 10 years.

**Conclusion:** Cumulative impacts to Wright's checkerspot butterfly would be negative and highly significant. The destruction of host plants and its drought escape habitat would result in a significant reduction in the Wright's checkerspot butterfly population, leading to the possible extinction of this species within 10 years.

**California Gnatcatcher.** The California Gnatcatcher formerly occurred in southern California west of the Transverse and Peninsular Ranges, from the Mexican-United States border north to the lower Santa Clara Valley in Ventura County. This bird is restricted to moderately dense coastal sage scrub community types (Atwood 1980). The range of the species in the United States has contracted to a northern limit in Orange County and western Riverside County, with a now-isolated population in Los Angeles County located on the Palos Verde Peninsula (Dunn and Garrett 1987). Due to habitat loss and possible nest parasitism, Atwood (1980) speculated that the species had been reduced to less than 2,000 breeding pairs in the United States. Atwood also reported Oberbauer's (1979) suggestion that up to 70% of the original coastal sage scrub vegetation in San Diego County has been destroyed or modified.

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Key habitat components required to support California Gnatcatcher are coastal sage scrub with California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*). Based on these habitat components, it is concluded that 36 BLM-administered parcels within the planning area contain 5,084 acres of suitable habitat. California Gnatcatcher has been recorded recently on eight of these parcels. In this alternative, a total of 1,069 acres of suitable habitat, including two parcels with California Gnatcatcher records, would be sold or exchanged, and 2,034 acres, including 3 parcels with California Gnatcatcher records, would be exchanged for land within the Steele Peak Reserve. Three hundred acres with recent California Gnatcatcher records would be leased to the city of San Diego under an R&PP lease. No major vegetation type conversions would be expected on the R&PP lease. The remaining 1,681 acres of suitable habitat would be retained.

Impacts from mineral resources development is expected on up to 32 acres contained within seven parcels. In addition, the areas surrounding the well sites would be degraded due to noise, traffic etc., so that the total area lost to California Gnatcatcher is estimated at 26 acres per well or 150 acres for total development.

**Conclusion:** This alternative would have a moderately negative impact on California Gnatcatcher. Of the 5,084 acres of suitable habitat administered by the BLM within the planning area, 21% would be sold or exchanged, and 40% would be exchanged for land within the Steele Peak Reserve; all of these lands could be impacted by eventual development. A total of 33% of the suitable habitat administered by the BLM would be retained and 6% would be leased under the R&PP Act. Only one of the parcels with recent records of California Gnatcatcher would be retained, and another would be leased under the R&PP Act and habitat values are expected to remain relatively intact. The losses of habitat to land disposal and subsequent development are somewhat offset by the acquisition of 3,820 acres in the Steele Peak Reserve. Coastal sage scrub is a dominant habitat type within the reserve and consolidation within the Reserve would probably not result in a net loss of this key habitat type under BLM administration. It is expected that at least some of this coastal sage scrub would be potential, if not occupied habitat for California Gnatcatcher. Impacts to California Gnatcatcher from mining would be negligible because of the limited acreage involved. Cumulative impacts to this species would be moderately negative.

**Orange-throated Whiptail.** McGurty (1980) summarized published reports describing habitat characteristics for this lizard. He reported that the species is endemic to extreme southern California, and is associated with mosaic patterns of alternating open and dense vegetation dominated by a variety of low chaparral and coastal sage scrub vegetation types, and that these vegetation communities are being lost to urban and agricultural development. Interpretation of historical (museum and literature) records (Brattstrom, pers. com. 1990) indicates that this species may occur on at least four parcels representing 1,598 acres in San Diego County. These observations are in addition to the 52 historical observations of this species referenced by CNDDDB within three miles of BLM-administered public lands (33 observations in Riverside County and 19 in San Diego County). Nearly two thirds of the observations in Riverside County were clustered in the area known as the Gavilan Plateau between Steele Peak and Estelle Mountain. In addition orange-throated whiptails have been recorded recently on nine BLM parcels (containing 4,316 acres) within the planning area. These nine parcels are widely dispersed throughout southwestern Riverside County and eastern San Diego County.

In this alternative, four of the nine parcels with recently recorded orange-throated whiptails (854 acres) would be sold, three parcels (590 acres) would be exchanged to consolidate land within the Steele Peak Reserve, one parcel (40 acres) would be retained and one parcel (2,832 acres) would continue under an R&PP lease. In addition, one parcel (80 acres) with potential habitat for this lizard would be retained under BLM administration and three parcels (1,518 acres) would be exchanged for BLM acquisitions elsewhere.

Negative impacts from mineral resources development is expected to occur on up to 32 acres included in seven parcels; these impacts would not be significant.

Conclusion: The cumulative impacts of this alternative would be negative, but not significant to orange-throated whiptail. Of nine parcels (4,316 acres) with recent records of whiptail occurrence, four (854 acres or 20%) would be sold. The remaining five parcels (3,462 acres or 80%) would be either retained, leased under the R&PP Act with no vegetation type conversion expected or exchanged for similar habitat within the Steele Peak Reserve. Considering the range of the lizard and the amount of known habitat under BLM administration, the net loss would not be significant.

**Southwestern Pond Turtle.** Brattstrom and Messer (1988) in their report to the California Department of Fish and Game stated that this turtle is currently found in only a few widely separated localities. The authors suggest several locations as possible areas for southwestern pond turtle management/mitigation-compensation. None of the recommended management areas contain BLM lands. They also document a small population in Lake Wohlford; this would marginally include the adjacent parcels administered by BLM: 247-331 and 247-332, both of which would be sold or exchanged. Neither of these parcels are known to actually support pond turtles. In addition, the BLM administers 1.5 miles along the Santa Margarita River. This river is known to support southwestern pond turtles downstream, where they are associated with beaver ponds near Fallbrook. Beaver ponds also exist on the BLM-administered segments of the river and could support southwestern pond turtles. These parcels would be retained under this alternative.

Conclusion: Land disposal actions in this alternative and any subsequent development of those lands would not likely have any significant cumulative impact on southwestern pond turtles.

### **Game Species**

Existing habitat for mule deer would be negatively impacted through the disposal and eventual development of 24,247 acres of potential deer habitat administered by the BLM. For the purposes of this management plan, only parcels larger than 600 acres were considered as potential deer habitat. The recreational development of 10,913 acres of potential deer habitat, through R&PP leases, would contribute to the degradation of existing habitat for mule deer. Furthermore, it is expected that up to 25% (12,000 acres) of the 51,631 acres of potential quail habitat available for disposal would be negatively impacted as a result of loss of the habitat loss due to the eventual development of lands transferred from federal into private ownership.

In addition to the negative impacts to game habitat resulting from the development of land transferred from BLM management, an increase in OHV use on existing routes is expected due to encroaching development and population growth. This increased use, coupled with the inability of law enforcement to provide continual patrol in a given area, would result in an increase in cross-county use.

Impacts to game habitat would also occur as the result of mining activity. It is expected that up to 200 acres of habitat loss could result from strip mining for tungsten or other mineral deposits in the southeastern portion of the Beauty Mountain Management Area. In addition, the areas surrounding these mining sites would be degraded by noise and traffic, disrupting deer use and movement patterns so that the effective area lost to mule deer is estimated to be 2,000 acres.

These negative impacts would be partially offset by the exchange of over 6,300 acres of existing BLM-administered parcels to consolidate public lands. This consolidation would help facilitate vegetation management, primarily controlled burning of decadent chaparral. Controlled burns would benefit deer, with an expected increase of 1,120 acres of high quality early seral vegetation over a 4,480 acre area, during any 10-year period.



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Conclusion: The loss of BLM-administered deer habitat through all actions considered in this alternative would be 39,042 acres. Partially offsetting these impacts is the exchange of over 6,300 acres of existing BLM-administered parcels to consolidate public lands. This consolidation would help facilitate vegetation management, primarily controlled burning of decadent chaparral. Controlled burning would benefit deer, with an expected increase of 1,120 acres of quality early seral vegetation over a 4,480 acre area over any 10-year period. In total, this alternative would result in a net loss of 28,262 acres or 30% of the existing deer habitat on BLM-administered lands, and a possible net loss of up to nine percent of the quail habitat administered by BLM. These habitat losses are expected to have a moderate to high negative impact on mule deer populations and a low to moderate negative impact on quail populations on BLM-administered land. From a regional perspective, however, the cumulative impacts are not expected to be significant.

**Important Wildlife Habitat Types**

From a regional standpoint, both coastal sage scrub and riparian systems have been greatly diminished as a result of historic and present urban and agricultural development. It is estimated that between 70 and 90% of the historic riparian habitat has been lost, and much of what remains has been severely impacted (U.S. Council on Environmental Quality 1978). Coastal sage scrub systems have also apparently fared poorly in southern California. Oberbauer (1979) inferred that up to 70% of the original coastal sage scrub vegetation in San Diego County has been destroyed or modified. Associated with these habitat losses has been the increase in animal species, dependent on these habitats, that have been listed as threatened, endangered or are candidates for this listing.

**Coastal Sage Scrub.** In this alternative, 6,484 acres (60%) of a total of 10,817 acres of manageable coastal sage scrub (coastal sage scrub in blocks of 30 acres or more) would be sold or exchanged and could be eventually developed. Losses of coastal sage scrub from federal ownership would be offset by the acquisition of 3,820 acres of primarily coastal sage scrub within the Steele Peak Reserve. An additional 1,615 acres (15%) of manageable coastal sage scrub would be available for R&PP lease, or would be transferred from federal ownership only if habitat values on these lands were protected. Habitat values would not be significantly altered on lands involved in R&PP leases or protective disposals. A total of 2,718 acres (25%) of manageable coastal sage scrub would be retained under this alternative.

**Riparian Habitat.** In this alternative, 37.3 miles (28% of the total 130 miles of riparian habitat within the planning area) would be sold or exchanged and eventually developed. Of the riparian area lost from federal ownership, 25.8 miles are considered as manageable riparian habitat (riparian segments administered by the BLM at least 0.5 miles in length). Full commercial development of sand and gravel resources in the Agua Dulce area would destroy as much as 3 miles of riparian habitat. In addition, 19.4 miles (15%) of the total riparian habitat (16.0 miles of manageable riparian habitat) would be leased under the R&PP Act or transferred to some other land managing agency. Habitat values on these lands are not expected to be significantly altered. Throughout the planning area, 74.2 miles (57%) of the total riparian habitat would be retained by the BLM in this alternative, which includes 69.3 miles of manageable riparian habitat.

In addition to the impacts associated with disposal actions, negative impacts to riparian and coastal sage scrub communities would result from OHV use. These expected impacts would result from physical damage to plants within these communities and from accelerated soil erosion due to increased OHV use. Growing OHV use is expected to accompany encroaching development and population growth, resulting in additional unplanned routes of travel and an increase in cross-county use.

Conclusion: Overall, a net loss of coastal sage scrub and riparian communities managed by BLM would occur under this alternative. Sixty percent of the manageable coastal sage scrub administered by BLM would be sold or exchanged; 15% would be available for protective disposal or R&PP lease;

and 25% would be retained under BLM management. The acquisition of 3,820 acres of primarily coastal sage scrub within the Steele Peak Reserve would partially offset this loss. Twenty-three percent of the manageable riparian habitat in the planning area would be sold or exchanged; 14% would be available for protective disposal or R&PP lease; and 63% would be retained by the BLM. The expected level of cumulative negative impact to riparian and coastal sage scrub communities under this alternative would not be regionally significant.

## **Impacts to Vegetation**

### **State-Listed Species**

**California orcutt grass (*Orcuttia californica*).** Approximately 15% of the potential habitat for this species on BLM-administered lands would be exchanged in this alternative. This habitat, south of Steele Peak, would be used for acquisition of Stephens' kangaroo rat habitat within the Steele Peak area. This grass would be impacted by the eventual development of the lands utilized in these land exchanges. Although some potential habitat for California orcutt grass would be acquired through these land exchanges, a net loss is nevertheless expected. Because populations of this species have already been extirpated in Los Angeles County and are likely to become extirpated in southwestern San Diego County, the land disposal actions in this alternative and the probable development of those lands would have significant and negative cumulative impacts.

**Dunn's mariposa lily (*Calochortus dunnii*).** One parcel at Jamul Mountain, with an existing population of this lily, would be sold and subject to private development under this alternative. This represents a 15% reduction of the total populations on BLM lands. Known populations on Otay Mountain and potential habitat on BLM lands from Otay to Tecate Peak would be retained. Since many of the populations and much of the potential habitat for this species occur in the Cleveland National Forest to the east, this alternative would not have significant negative cumulative impacts.

**Munz's onion (*Allium fimbriatum* var. *munzii*).** Potential habitat for this species on BLM-administered lands would be reduced by approximately 20% through the exchange of lands west of Steele Peak to acquire Stephens' kangaroo rat habitat within the Steele Peak area. Some potential habitat for this species would be acquired through these land exchanges, but a net loss is expected. Additionally, approximately 2% of the potential habitat on BLM lands, within parcels likely to be retained in federal ownership, would be disturbed by explorations for gold or other minerals in the Steele Peak area. Because this species is restricted to a fairly small range in western Riverside County, occurring in lowland areas that have been or are likely to be developed in the future, the loss of this potential habitat on BLM land would have significant negative cumulative impacts on this species.

**Nevin's barberry (*Mahonia nevinii*).** Some impact to potential habitat for this species could occur in the Castaic Lake area, associated with development of an R&PP lease. Approximately 30 acres of potential habitat located on federal mineral split-estate lands would be impacted by oil and gas exploration activities south and southeast of Castaic Lake. More importantly, however, all the habitat in the Oak Mountain area with known populations would be sold and subject to eventual development in this alternative. This represents a 15% loss of the known populations for this species on BLM-administered lands. Although some populations are known to occur in the Angeles and San Bernardino National Forests, potential habitats are not extensive in either of these areas. The loss of populations in the Oak Mountain area, to probable development, combined with the various impacts in the Castaic Lake area, would therefore represent a significant negative cumulative impact on that species.

**San Diego thornmint (*Acanthomintha ilicifolia*).** Under this alternative, a 40-acre parcel west of Otay Mountain, containing 5% to 10% of the potential habitat for this species on BLM-administered land, would be sold and subject to development. Although all potential habitat on Otay Mountain and populations occurring within the Cleveland National Forest would not likely be negatively impacted

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in the future, the cumulative impact of this alternative would be negative and significant in light of the amount of habitat that has already been lost to development.

**Slender-pod jewelflower (*Caulanthus stenocarpus*).** Potential habitat on BLM-administered lands would be reduced by 10%, overall, through land disposal actions in the Tule Valley area. However, because the populations and potential habitats located on U.S. Forest Service lands are not expected to be negatively impacted in the future, the transfer of this habitat to the private sector and possible development would have no significant cumulative impact.

**BLM-Sensitive Species**

**Cleveland goldenstars (*Mulla clevelandii*).** One 40-acre parcel, west of Otay Mountain, with potential habitat would be sold and subject to development in this alternative. Much of Otay Mountain has good potential for supporting this species. Based on historic occurrences, there is also potential habitat for this species on the Poppet Flat parcel in Riverside County. Approximately 2% of the latter potential habitat would be impacted by dispersed OHV use along existing routes of travel. Overall, this slight habitat degradation and the impacts associated with the land disposal west of Otay are not expected to represent a significant impact for this species. This is because most of the potential habitat for this species occurs on large parcels of public lands that would be retained in federal ownership in this alternative.

**Dense reed grass (*Calamagrostis densa*).** Less than 2% of the potential habitat for this species on BLM-administered land (primarily in the Black Mountain area) would be sold. The largest part of the potential habitat and most of the known occurrences for this species are located in the Cleveland National Forest, where impacts are expected to be minimal. This alternative would, therefore, have no significant cumulative impact on this species.

**Felt-leaved monardella (*Monardella hypoleuca ssp. lanata*).** Potential habitat and known populations of this species on BLM-administered lands would be reduced by 2% as a result of land sales. All of the land disposal actions involving this species would occur in the Tecate Peak area, while populations on Otay Mountain would not be affected. Major portions of the potential habitat and known populations occur in the Cleveland National Forest, and on Otay Mountain, and are unlikely to be impacted in the future. Therefore, no significant cumulative impact is expected on this species.

**Gander's pitcher sage (*Lepechinia ganderi*).** One parcel at Jamul Mountain, with known populations of this species, would be sold and subject to possible development in this alternative. This represents approximately a 5% reduction of the total population of this species on BLM-administered lands. Populations and potential habitat on Otay Mountain would not be impacted by land disposal actions. Since the only known populations and potential habitats that are likely to be protected in the future all occur on BLM-administered lands in a fairly restricted area of southwestern San Diego County, this 5% loss would represent a significant negative cumulative impact.

**Johnston's rock cress (*Arabis johnstonii*).** Fifty percent of the potential habitat for this species on BLM-administered land occurs on one small parcel in the southeastern part of the Riverside-San Bernardino Management Area. In this alternative, the sale and possible development of that parcel could result in significant negative impacts to this species. However, because known populations and most of the potential habitat occur in the nearby San Bernardino National Forest, and would be likely to be protected in the future, this impact is not expected to be significant cumulatively.

**Many-stemmed dudleya (*Dudleya multicaulis*).** Potential habitat for this species on BLM-administered land is located west of Steele Peak. Approximately 25% of this potential habitat would be subject to disposal through land exchanges to acquire Stephens' kangaroo rat habitat within the Steele Peak Reserve. Little potential habitat for this species would be acquired during these land exchanges, and therefore a net loss is expected. While populations of this species occur in the San Bernardino and

Angeles National Forests, the current range is fairly limited. The transfer of this potential habitat to the private sector and the probable development therefore represents a significant and negative cumulative impact.

**Narrow-leaved nightshade (*Solanum tenuilobatum*).** Approximately 5% of the habitat with known populations of this species on BLM-administered land would be sold in this alternative (primarily in the Tecate Peak area). These areas could be negatively impacted by the subsequent private development of this land. Because known populations on Otay Mountain and in the Cleveland National Forest are not likely to be impacted in the future, this would not represent a significant cumulative impact.

**Orcutt's brodiaea (*Brodiaea orcutti*).** Potential habitat for this species on BLM-administered land would be reduced by approximately 6% through the sale of lands in southern San Diego County. Known occurrences on Otay Mountain and in the Cleveland National Forest are not likely to be impacted in the future. There would be, therefore, no significant cumulative impact.

**Palmer's grapplinghook (*Harpagonella palmeri* var. *palmeri*).** One of only two known populations on BLM-administered lands (in the Oak Mountain area) would be sold in this alternative. Because this species is restricted to lowland areas which have been or are likely to be developed, the cumulative impacts resulting from the sale and eventual development this parcel under this alternative would be significant and negative.

**Parry's tetracoccus (*Tetracoccus dioicus*).** The only known population of this species on BLM-administered land would be impacted by the sale and possible development of the Rainbow Creek parcel. Potential habitat for this species on BLM-administered lands would be reduced overall by 10% as a result of land sales proposed in this alternative. Because no other populations are known to occur, either on BLM-administered lands or on U.S. Forest Service lands, and because most potential habitat for that species is located in areas likely to be developed in the future, the cumulative impact of this alternative would be negative and significant.

**Payson's jewelflower (*Caulanthus simulans*).** The only known population on BLM-administered land would be impacted by the sale and possible development of the Oak Mountain parcels. Potential habitat for this species on BLM-administered lands would be reduced overall by approximately 10%, primarily in the Tule Valley area and in various parts of the Riverside-San Bernardino Management Area. Additionally, less than 1% of the potential habitat on BLM-administered lands would be impacted by mineral explorations in the Steele Peak area. Since the greatest portion of the potential habitat for this species occurs within the San Bernardino and Cleveland National Forests, and is not likely to be disturbed significantly in the future, the cumulative negative impact of this alternative is not expected to be significant.

**San Diego barrel cactus (*Ferocactus viridescens*).** Known populations on BLM-administered lands could be reduced by 5% to 10% through the sale and possible development of a 40-acre parcel west of Otay Mountain. Given the very small range for this species, its location in areas of southwestern San Diego County that have or are likely to be developed in the future, and because no other populations are known outside of this small range, the cumulative impact of this alternative would be negative and significant.

**San Diego currant (*Ribes canthariforme*).** The only known population on BLM-administered lands would be impacted by the sale and possible development of the Lyon's Peak parcel. The greatest part of the range for this species, and most known populations, occur on National Forest lands which are likely to be protected in the future. However, the cumulative impact of this alternative on this species would be negative and significant, since it would impact a relatively isolated population that may have important genetic values for the conservation of this species.

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**San Felipe monardella (*Monardella nana* ssp. *leptosiphon*).** Potential habitat (primarily in the Beauty Mountain Management Area) would be impacted by prescribed burning at frequencies of more than one burn per 10 years at elevations above 4500 feet. Avoidance of short-rotation prescribed burning above 4500 feet would make the cumulative negative impact of this alternative insignificant.

**San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*).** Up to 50% of the potential habitat on BLM-administered land (primarily in the Hasley Canyon area, based on historic records) would be sold and subject to development. Since most of the habitat for this species (historically in the San Fernando Valley and Los Angeles areas) has been impacted by development, the cumulative impact would be negative and significant.

**Tecate cypress (*Cupressus forbesii*).** Known populations on BLM-administered lands would be reduced overall by 3 to 5% through the sale and eventual development of the Tecate Peak parcel. Because the Tecate cypress population at Tecate Peak, by virtue of its isolation, could represent a genetic variation from the main population on Otay Mountain, this would result in a significant negative impact. Immature stands of cypress, located east of the Minnewawa Truck Trail and north of the Otay Mountain Truck Trail, would be impacted and their regeneration jeopardized, by prescribed burns on the Otay grazing allotment. The cumulative impact would be negative and significant.

**Tecate tarplant (*Hemizonia floribunda*).** Known populations on Otay Mountain would not be impacted, but approximately 30% of the potential habitat on BLM-administered lands would be sold and impacted by development in southern San Diego County. This would be a significant negative impact. Since the potential habitat for this species is located in areas of southern San Diego County that have been or are very likely to be developed in the future, the cumulative impact of this alternative would be negative and significant.

**Variegated dudleya (*Dudleya variegata*).** The Jamul parcel contains the only known population of this plant on BLM-administered lands. In this alternative this parcel would be sold and subject to development. Given that the range of this species is limited to southwestern San Diego County, an area that has been or is likely to be mostly developed in the future, the impacts to this population would represent significant negative cumulative impacts.

**Conclusion:** This alternative would not have significant negative cumulative impact on any federally listed species. It would have significant negative cumulative impacts on potential habitats for four state-listed species: California orcutt grass, Munz's onion, Nevin's barberry, and San Diego thornmint. This is largely due to the sale or exchange of BLM-administered land and the impacts resulting from the private development of those lands, but this is also because most other potential habitat for these species occurs on private lands which are prime candidates for development. This alternative would have significant negative cumulative impacts on populations of eight BLM-sensitive species: Gander's pitcher sage, Palmer's grapplinghook, Parry's tetracoccus, San Diego barrel cactus, San Diego currant, Tecate cypress, Tecate tarplant and variegated dudleya, and potential habitat for another: many-stemmed dudleya. All but one (Palmer's grapplinghook) are candidates for federal listing. This alternative may also impact the potential habitat of the San Fernando Valley spineflower, in the Hasley Canyon area. In all cases, the impacts to these species are more significant because the species and/or their potential habitats would also be impacted by the development of private lands. These privately owned areas occupy areas of the South Coast Planning Area that are, for the most part, not protected and that are likely to be developed in the future (i.e., primarily lowland areas of mostly private lands near cities, towns, or highways).

#### **Sensitive Plant Communities**

**Coastal and Valley Freshwater Marsh.** Of an estimated 10 acres of this community on BLM-administered lands, all are included in parcels subject to transfer from federal ownership in this

alternative. These areas could be negatively impacted by subsequent development. Given the relative rarity of this community type in the South Coast Planning Area, and its reduction by agricultural and urban expansion, this would represent a significant negative cumulative impact.

**Freshwater Seep.** Of an estimated 1.5 acres of this habitat on BLM-administered lands, all are contained within parcels that would be sold or exchanged under this alternative. These areas could be negatively impacted by subsequent development. While this impact could be considered significant locally, it is not considered to be significant regionally.

**Engelmann Oak Woodland.** Of an estimated 45 acres of this community on BLM-administered lands, all are included in parcels that would be sold or exchanged in this alternative. These areas could be negatively impacted by subsequent development. Because most of this community type is located within the Cleveland National Forest, and is likely to be protected in the future, this would not represent a significant negative cumulative impact.

**Riversidean and Diegan Sage Scrub.** See the Wildlife section (under impacts to Important Wildlife Habitat Types) for a discussion of the impacts of this alternative on these communities.

**South Coast Live Oak Riparian Forest.** A total of 33.2 miles of riparian habitat occur throughout the planning area where this plant community is the dominant vegetation type. Of this total, 16 miles contain at least one other riparian community interspersed in the more dominant live oak forest. Approximately 12 miles (37%) of riparian communities containing South Coast Live Oak Forest would be sold or exchanged to the private sector and could be negatively impacted by subsequent development. In this alternative, 2.6 miles (8%) would be leased under the R&PP Act or some other protective transfer where development is expected to be minimal. A total of 18.5 miles (55%) of this riparian community would be retained by the BLM. Although this riparian community is also found on U.S. Forest Service lands, where it is likely to be protected in the future, land disposal and the subsequent development would result in a major loss of this type of community at intermediate elevations. Therefore, the cumulative impact would be negative and significant.

**Southern Cottonwood-Willow Riparian Forest.** Of an estimated 3 miles of riparian habitat where this community is the dominant vegetation type, approximately 2 miles (67%) would be sold or exchanged to the private sector and could be impacted by subsequent development. Approximately 0.9 miles (30%) would be leased under the R&PP Act or transferred to some protective management. Only 0.1 miles (1%) of this riparian community would be retained in this alternative. Even though this plant community occurs along streams throughout the south coast mountain ranges (Holland 1986), as well as within several national forests where it would likely be protected in the future, this community is nevertheless expected to be negatively and significantly impacted by this alternative. This is because of the relatively large impact that BLM land disposal actions and subsequent development would have on the lower elevation portion of this community's range, where most of it has or is likely to be disturbed or eradicated by the development of private lands.

**Southern Interior Cypress Forest.** Of an estimated 6,000 acres of this community on BLM-administered lands, approximately 75 (1%) acres would be sold or exchanged to the private sector. Because the Tecate cypress population at Tecate Peak, by virtue of its isolation, could represent a genetic variation from the main population on Otay Mountain, the development of this area could be a negative and significant impact to this community. In addition, approximately 1,000 acres of immature stands of Tecate cypress east of the Minnewawa Truck Trail and north of the Otay Mountain Truck Trail could be significantly impacted by escaped prescribed burns, which are highly probable in that area. This alternative would therefore have significant negative cumulative impacts.

**Southern Sycamore-Alder Riparian Woodland.** All of the estimated 0.5 miles of riparian habitat would be retained where this community is the dominant vegetation type. Southern Sycamore-Alder Riparian Woodland also occurs as a lesser component in some areas with South Coast Live Oak

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Riparian Forest. Where this occurs, the relatively small amount of the alder woodland has not been separated from the more dominant oak community; additional uncalculated amounts of alder could be impacted along with the oak riparian woodland. Because this community occurs along streams throughout the south coast mountain ranges (Holland 1986), including areas within several national forests where it would likely be protected in the future, this impact would not be cumulatively significant.

**Southern Willow Scrub.** Of a total of 9.2 miles of riparian habitat where this community is the dominant vegetation type, approximately 5.3 miles (58%) would be sold or exchanged. A total of 0.7 miles (8%) of this riparian community would be transferred to some protective management. A total of 3.1 miles (34%) of this community would be retained by BLM. Additional uncalculated amounts of Southern Willow Scrub may be disposed or retained as part of the acreage calculated for a more dominant community, often oak riparian woodland. Because this community has been, and is likely to be, reduced elsewhere by urban expansion, flood control, and channel improvements (Holland 1986), the impacts associated with the proposed BLM land disposal would represent a significant negative cumulative impact.

**Other Riparian Communities.** Of an estimated 30.2 miles of unclassified riparian forest community and 52.7 miles of unclassified riparian communities located on public lands in the South Coast Planning Area, approximately 8.4 miles (28%) and 9.5 miles (18%) respectively, would be sold or exchanged. An additional 8.9 miles (29%) of unclassified riparian forest and 4.8 miles (9%) of unclassified riparian communities would be available for some protective transfer where development would be expected to be minimal. A total of 12.9 miles (43%) of unclassified riparian forest and 38.4 miles (73%) of unclassified riparian habitat would be retained in this alternative. This loss of riparian forest may include a additional losses of South Coast Live Oak Riparian Forest community.

Conclusion: This alternative would have negative and significant cumulative impacts on the following sensitive plant communities: Coastal and Valley Freshwater Marsh, South Coast Live Oak Riparian Forest, Southern Cottonwood-Willow Riparian Forest, Southern Interior Cypress Forest, and Southern Willow Scrub.

## **Impacts to Open Space Values**

The primary impact to open space values would result from the disposal of BLM-administered lands and their subsequent development. Under this alternative it is expected that approximately 35,460 acres of public land, of which 59% is rated as having either high or medium in open space values, would be disposed and eventually developed. This impact would be compounded by the projected growth and development on private lands with the additional loss of open space.

For the most part, open space values are expected to be maintained on 93,002 acres of BLM-administered lands, of which 89% is rated as having high or medium for open space values. These lands would either be retained under BLM management, maintained under R&PP lease, disposed of with protective conditions, or identified for transfer to the U.S. Forest Service. In addition, land ownership adjustments would add approximately 6,000 acres to public land ownership under this alternative. Open space values on these lands may be affected by actions such as prescribed burning or mineral exploration/development. The impacts of prescribed burning would be minimal and of short duration, and overall impacts from the expected levels of mineral activity would also be negative but not significant.

Conclusion: Overall, open space values would be maintained on 93,002 acres of public land including 82,771 acres rated as having high or moderate open space value. Conservation of open space would also be enhanced by land acquisitions and consolidation. However, in some areas, open space values would be negatively impacted by the loss, through the disposal and subsequent development, of 35,460 acres of public land including 20,921 acres rated as having high or moderate

in open space value.

### **Impacts to Recreation Use**

This alternative would result in the transfer or disposal of many public lands with recreation potential. The loss of these lands will eliminate both current and potential future uses on those parcels. Current users will be displaced to other areas offering similar types of opportunities.

Limited acquisition of easements will provide improved access to a few of the larger parcels, and thereby improve opportunities for recreation use in some areas.

The OHV designation will provide opportunities for motorized vehicle use, limited to existing routes on most parcels, as long as the lands remain under federal management. As a result of disposal actions, available mileage of motorized recreational trails will drop from the existing 260 to 182 miles. Most of this reduction, however, would be short segments including many which have no existing legal public access.

Since no facilities would be developed, no developmental impacts as a result of disposal actions will occur, nor will any new recreational opportunities be available.

No visitor services will be provided, and in the absence of information directing recreationists to public land, use levels will remain relatively low.

Vegetation manipulations will marginally increase recreational opportunities for deer and quail hunting and for nature study, and will cause short-term negative impacts to scenic values.

Overall, recreation use is expected to increase from the existing level of 37,000 to 54,000 VUD as a result of urban expansion and increasing population growth. Retained parcels will generally show increased concentrations of users, with an increasing potential for recreational conflicts. The amount of use expected in this alternative is considered insignificant in the context of the total outdoor recreation usage in the planning area.

Conclusion: Alternative 1 does little to benefit the recreating public, or to utilize existing recreation resource potential. Increases in public recreation use from 37,000 to 54,000 VUD can be mostly attributed to urban expansion and population growth, and additional user conflicts can be expected. The loss of 78 miles (30%) of motorized vehicle routes is considered to be a minor loss given the currently low use levels and large amount of available vehicle routes. The cumulative negative impact of increased this alternative to recreation supply and demand in the South Coast Planning Area is not significant.

### **Impacts to Mineral Development**

Impacts to mineral development could result from restrictions placed on development activities and from the disposal of lands with mineral potential, since their subsequent land-use developments could interfere with development of mineral resources.

Oil and gas leasing stipulations under this alternative could increase development costs in some instances. Development of known reserves would not be precluded, although drilling of exploratory wells may be hampered due to application of No Surface Occupancy Stipulations.

Land tenure adjustments under this alternative are expected to result in the disposal of surface lands having moderate and high potential mineral resources as shown in Table 4-2.

Impacts from land tenure adjustments will vary, depending on the mineral potential of lands acquired



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and the conditions of individual land tenure adjustment actions (i.e. recovery of fair market value, reservation, or exchange of mineral rights). Lands acquired for the protection of threatened or endangered species habitat will not likely be available for discretionary mineral actions, and operations to mine locatable minerals, under 43 CFR 3809 would be restricted to protect sensitive species.

Conclusion: Negative impacts to potential mineral development resulting from disposal of surface lands with mineral potential would be low to moderate within the planning area. However, localized impacts would be different than the planning area average because the planning area includes several different markets. Oil and gas leasing stipulations would increase development costs for new leases and complicate exploratory efforts.

**Table 4-2. Mineral Potential of Lands Available for Disposal**

Resource	Total Acres on BLM Surface	Acres Disposed	Percentage Reduction
Gold	24,490	2,589	10.6%
Gemstone & Dimension stone	11,931	2,814	23.5%
Metallic and non-metallic	30,982	6,557	21.1%
High Potential Sand and Gravel	8,852	2,402	27.1%
Moderate Potential Sand and Gravel	71,183	18,601	26.1%

### Impacts to Paleontologic Resources

Negative impacts to paleontological resources would primarily result from disposal of lands to the private sector and the subsequent development of these lands. At projected growth rates, both Los Angeles and Riverside Counties are expected to allow more concentrated housing in outlying areas. In Los Angeles County, some of the disposal parcels have a high potential for significant fossil-bearing deposits. In Riverside County, parcels containing significant fossil-bearing strata, in the Badlands area would also be disposed. Reasonably foreseeable development for these lands would be for low-density residential use (i.e. one residential unit per 40 acres). As a result, the potential impacts to fossil bearing deposits would occur from grading of the house sites, associated landscaped areas, and access roads. Subsequent to disposal, the responsibility for enforcing the California Environmental Quality Act in terms of mitigation of this non-renewable resource will lie with the respective counties. It is estimated that disposal and subsequent grading of the lands in Los Angeles County would potentially have a low to moderate negative impact on paleontological resources. In terms of the Badlands, grading would result in direct degradation to a significant, non-renewable resource, since fossil-bearing strata are situated near the surface.

Sand and gravel quarry activities are expected to occur on 200 to 600 acres of split-estate lands in the Agua Dulce area of Los Angeles County. This could have a negative impact on paleontological resources. Testing and evaluation of the sites prior to mining, with appropriate mitigation measures taken, would alleviate any negative impacts.

In the next ten years, oil and gas development on BLM lands in Los Angeles County is expected to cause an additional 100 acres of surface disturbance. Negative impacts to paleontological resources

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from this activity would be minimal to moderate, since grading for drill pads, and access roads is normally not extensive.

OHV use would impact paleontologic resources in the Badlands area and the Poppet Flat area of Riverside County, as well as those resources in Los Angeles County. These impacts could result from direct crushing and accelerated soil erosion which could expose fossils. Restriction of OHV use to existing routes of travel in these areas, however, would keep impacts from OHV use to a minimum.

Conclusion: In the Badlands of Riverside County, land disposal actions would release a significant paleontological resource from federal protection. Land grading for subsequent development would result in direct degradation to a significant, non-renewable resource, since fossil bearing strata are situated near the surface. Low to moderate negative impacts to fossil-bearing deposits would result in Los Angeles County as a consequence of land disposal, transfer, mining, or recreational activities.

**Impacts to Kuchamaa  
(Native American Religious Values)**

The primary negative impacts to Native American religious values would result from the disposal of Little Tecate Peak, which lies in close proximity to Kuchamaa (Tecate Peak). Kuchamaa and Little Tecate Peak hold very significant religious values to the local Native American population. Past impacts to these peaks include disturbance by communication facilities, and residential development of private lands at the base of these mountains, thus negatively impacting the viewshed, which is part of the religious perception/experience of the peaks. The disposal and subsequent development of the Little Tecate Peak parcel would cumulatively add to the impacts of residential development on or along the base of the mountain, thus impacting the viewshed of Kuchamaa.

The vegetation management actions (prescribed burning) and levels of recreation use anticipated under this alternative are not expected to negatively affect Kuchamaa.

Conclusion: The disposal and subsequent development of the Little Tecate Peak parcel would have a significant negative impact on Native American religious values, associated with the sacred site of Kuchamaa.

**Impacts to Watershed  
(Beauty Mountain Management Area)**

Approximately 150 acres (3%) of the sensitive watershed area would be degraded by tungsten mining and related activities in the Beauty Mountain Management Area. Soil erosion, stream bank deterioration, and downstream siltation would increase and impact the lower reaches of the watershed southwest of the Pawnee Mine site.

Conclusion: The Beauty Mountain watershed is one of the few pristine watersheds located on public lands. Given the importance of this particular watershed for local water resources, this alternative would have a negative and significant cumulative impact to soil and water resources.

## Alternative 2 - Administrative Adjustments

### Reasonably Foreseeable Development

#### Lands Actions

Regional land use and growth projections are the same as described for Alternative 1.

A total of 67,018 acres would be available for disposal through exchange or sale. Reasonably foreseeable development following transfer from federal ownership for 75% (50,625 acres) of these lands would be predominantly for residential use, in accordance with local government land use plans, with a density of one dwelling unit or more per forty acres. For 25% (16,393 acres) of the lands, however, either disposal is conditioned on protecting sensitive resources or extensive development is not expected even if the lands are transferred from federal ownership. The expectations for these lands are described below:

1. A total of all the 16 parcels (3,402 acres), which are located within Stephens' kangaroo rat (SKR) Reserve Study Areas are available for disposal only if the habitat would be protected under new ownership. It is expected that some of these lands will be selected as SKR Reserve Areas and acquired by the Riverside County Habitat Management Agency.
2. One 200-acre parcel, with a recent record of the federally endangered Least Bell's Vireo, is identified for disposal only if the habitat would be protected.
3. One 50-acre parcel acres, identified as having potential for occurrence of the federally endangered slender-horned spineflower, is available for disposal only if surveys reveal that slender-horned spineflower plants are not present.
4. There are 12 parcels containing 12,055 acres in San Diego County which are currently leased by local government agencies under the Recreation and Public Purpose (R&PP) Act or are covered by existing lease applications. It is expected that these lands will be used in accordance with development plans which primarily call for the construction of recreation staging areas and trails for non-motorized use.
5. Five of the parcels near Castaic Lake in Los Angeles County, with a total of 686 acres, are expected to be transferred to the California State Department of Water Resources under the R&PP Act. Development of these parcels is will be limited to the provision of facilities for recreational use.

No acquisitions of public lands by BLM are expected under this alternative.

#### Recreation Actions

OHV designations on most of the lands would limit motorized vehicle use to existing routes of travel. As a result of this alternative, primarily the disposal of parcels from federal ownership, the total length of existing routes on BLM public lands would be reduced from 260 to 124 miles.

No development of recreational facilities will take place under this alternative. No recreational acquisitions will be made and few or no visitor services will be provided.

Recreation use levels will increase from the existing 37,000 to 42,000 VUD. This is due to increases in use on the parcels retained in federal ownership. The higher levels of use will result from population growth and urban expansion.

## Mineral Development

**Sand and Gravel Development.** Development of sand and gravel resources is expected to be the same as described for Alternative 1.

**Oil and Gas Development.** Development of oil and gas resources is expected to be the same as described for Alternative 1.

**Locatable Mineral Development.** In most areas, development of locatable mineral resources is expected to be the same as described for Alternative 1. In the Riverside-San Bernardino County Management Area, however, exploration for gold resources will gradually decline over the next ten years as lands are disposed.

## Vegetation Management Actions

Management actions for Alternative 2 would be the same as those described in Alternative 1.

## Environmental Consequences

### Impacts to Wildlife

#### Federally Listed or Proposed Species

**Unarmored Three-spined Stickleback.** Refer to Alternative 1 for a discussion of the current status of this fish species.

This endangered fish does not occur on BLM-administered land. Its range within the Santa Clara River is, however, adjacent to several small public land parcels, and is downstream from 2,819 acres of public land and 21,806 acres of subsurface mineral estate with high to medium potential for aggregate material extraction and/or oil and gas development. The reasonably foreseeable development of these resources over the next 20 years is expected to result in the disturbance of up to 600 acres for sand and gravel extraction and the development of 100 oil and gas wells. This puts the species in a position of potentially being affected from secondary impacts related to oil spills and sand and gravel extraction, including increased sediment loads.

**Conclusion:** The cumulative impacts to unarmored three-spined stickleback would be a negative, but not significant, under this alternative. State requirements, BLM standard stipulations and a controlled surface occupancy stipulation on upstream areas would control the indirect impacts to unarmored three-spined stickleback in the typical mineral development scenario.

**California Condor.** Refer to Alternative 1 for a discussion of the current status of this bird.

In this alternative, the disposal (through sale or exchange) of 3,596 acres would include the disposal of 442 acres of the 780 acres of condor core range administered by BLM. An additional 3,073 acres within the area identified as the limit of the condors' main range would be subject to disposal and would be impacted by expected low-density development (one dwelling unit per 40 acres).

The development of sand and gravel resources on federal mineral split-estate land in the

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### Alternative 2 - Administrative Adjustments

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management area is expected to impact up to 600 acres of potential habitat (habitat outside of the core area) of the California Condor. At present, 18% of the identified condor habitat within the planning area has been classified as having moderate to high potential for oil and gas development. Oil and gas development on BLM-administered land is expected to create 100 acres of new surface disturbance in association with well drilling and ancillary facilities. Approximately 50% of the drilling activity would occur in existing oil fields within the area delineated as condor core habitat.

Conclusion: Impacts to condors from the land tenure adjustments proposed in this alternative are expected to be negative but not significant due to: (a) the small size of the parcels identified for disposal, (b) the extremely small acreage involved relative to the condor's identified core and home range area, and (c) the limited opportunity for residential development on most of the parcels due to topography. Of the more than 900,000 acres of identified California Condor habitat within the management area, a maximum of 700 acres would be impacted through the development of mineral resources on split-estate lands. Of this 700 acres, only 50 acres would occur within the area identified as core habitat, and this would be within an already existing oil field. Consequently, cumulative impacts to California Condors would be negative but not significant.

**Stephens' Kangaroo Rat.** Refer to Alternative 1 for a discussion of the current status of this species.

In this alternative, BLM-administered land within all of the reserve study areas (3,402 acres) would be available for sale or exchange to another land managing entity, where habitat values would be protected. It is anticipated that these lands would be acquired by another government agency or a group acting on behalf of the SKR reserve system. No public land would be acquired by the BLM for the conservation of Stephens' kangaroo rat in this alternative.

Parcels with Stephens' kangaroo rat and/or potential habitat outside of the reserve areas (3,518 acres) would be available for exchange or sale, including 296 acres of occupied habitat and 135 acres of potential SKR habitat (Montgomery 1989, RECON 1990). It is expected that these BLM-administered parcels would be surrounded by housing developments within the next 15 years. SKR habitat on these parcels would become further fragmented and the associated SKR populations would become increasingly isolated and ultimately extirpated in the next 20 years.

OHV use of existing routes on lands retained by the BLM will increase with encroaching development and population growth. This increased use, coupled with the inability of law enforcement to provide continual patrol in a given area, would result in additional unplanned routes of travel and an increase in cross-county use. Impacts to Stephens' kangaroo rat would occur through direct mortality of individuals from burrow collapse and indirect impacts from habitat degradation. Based on the analysis of 760 acres of occupied habitat located outside of the SKR reserve study areas (identified in the Habitat Conservation Plan) less than six acres of new disturbance is expected over 20 years, resulting in the death of less than 12 animals (Hicks and Cooperrider 1977, Montgomery 1989, and O'Farrell and Uptain 1989, RECON 1990). Conversely, this level of OHV activity is expected to enhance opportunities for SKR movement/pioneering activity by increasing the number of dirt roads linking SKR habitats to pockets of potential habitat.

Conclusion: This alternative would have a significant negative impact on Stephens' kangaroo rat. All BLM parcels with known or potential SKR habitat outside of the ten identified reserve study sites would be available for sale or exchange (totaling 3,518 acres or 16% of the current range of this species). The BLM would not acquire any additional lands for the conservation of Stephens' kangaroo rat. The sixteen BLM parcels (3,402 acres) within all of the ten reserve study areas would be released by BLM only if the SKR habitat would be protected under the new ownership. Efforts to establish reserves from the ten study areas would be hampered by the lack of BLM involvement. Twenty-one percent of the acreage within the reserve study areas is managed by BLM. Additional funding would have to be found by supporters of the reserve system to acquire these parcels. In

addition, the 3,518 acres of occupied and potential habitat outside of the reserves would not be available as an exchange base to consolidate land within the reserves, further hampering funding efforts.

Increases in OHV use on lands retained by the BLM would have negative short-term impacts on SKR. This would, however, not have significant long-term impacts on the population as a whole. The cumulative impacts to Stephens' kangaroo rat from this alternative would be negative and significant.

**Least Bell's Vireo.** Refer to Alternative 1 for a discussion of the current status of this bird.

Least Bell's Vireos have been recorded on only one parcel administered by the BLM within the planning area. Several pairs were observed in April of 1988 on this parcel, in the Warm Springs drainage, a tributary of Murrieta Creek (G. Bell, pers. communication). The parcel is isolated by development from the closest major subpopulation in the Santa Margarita River and is slated for protective transfer in this alternative.

Eighteen other BLM parcels contain 12.9 miles of riparian systems with well-developed understories (shrub willows were used as an indicator species) and are considered to be potential habitat. In this alternative, five parcels containing 1.8 miles of potential habitat would be sold, including one parcel with 0.6 miles of a well-developed riparian habitat located three miles north of the Santa Margarita River and 0.3 miles of a well-developed riparian habitat in Rainbow Creek, within the Santa Margarita drainage. Two parcels totaling one mile of suitable habitat, including 0.9 miles of riparian growth in Fern Creek, would be available for exchange. Five parcels containing 5.2 miles of suitable habitat in riparian growth would be available for protective disposal to some other land managing agency. Two parcels containing 1.3 miles of potential habitat would be leased under the R&PP act. This includes one large parcel (with one mile of shrubby riparian growth) within a quarter of a mile of Least Bell's Vireo sightings on the Santa Ysabel Creek. Four parcels with 3.6 miles of riparian growth would be retained, including two parcels along the Santa Margarita River, and one near Hauser Mountain.

Even if retained under BLM-administration, the value of these small riparian segments to Least Bell's Vireo may fade as development encroaches. Unless efforts are made to consolidate land around relatively small riparian segments or to somehow buffer these areas, development would ultimately isolate these populations and make them more susceptible to cowbird parasitism, reducing the viability of these areas as Least Bell's Vireo habitat.

**Conclusion:** Cumulative impacts to potential Least Bell's Vireo habitat on BLM-administered land would be negative but would not be regionally significant for the species. Twenty-two percent of the suitable habitat on BLM lands would be available for sale or exchange; five percent would be available for lease or protective transfer. Only 28% of the potential habitat on BLM-administered land would be retained, although two of these three parcels are among the most likely to support Least Bell's Vireo. Regional impacts would not be significant. The majority of the suitable habitat administered by the BLM is on the fringes or outside of areas currently supporting the largest breeding populations. The relatively small riparian segments administered by the BLM represent potential breeding areas for this shrinking population.

### **Candidate Species**

**Wright's Checkerspot Butterfly.** The only known population of this butterfly occurs in the vicinity of Oak Mountain (Ballmer, pers. comm.). This species of butterfly is reported to be associated with both clay soils and a host plant, Dot-seed plantain (*Plantago erecta*). The disposal and eventual development of Oak Mountain, in conjunction with an expected increase in OHV use in the Oak Mountain area, would result in the destruction of both this butterfly's host plant species and disruption of areas where its larval form escapes to avoid desiccation during drought periods. These actions

would result in a reduction in the population, leading to the possible extinction of this species within 10 years.

Conclusion: Cumulative impacts to Wright's checkerspot butterfly would be negative and highly significant. The destruction of host plants and its drought escape habitat would result in a significant reduction in the Wright's checkerspot butterfly population, leading to the possible extinction of this species within 10 years.

**California Gnatcatcher.** Refer to Alternative 1 for a discussion of the current status of this species.

Based on key habitat components, it is concluded that 36 public parcels within the planning area contain 5,084 acres of suitable habitat. California Gnatcatcher has been recorded recently on eight of these parcels. In this alternative, 600 acres of suitable habitat would be retained and 300 acres with recent California Gnatcatcher records would be leased to the city of San Diego under an R&PP lease. No major vegetation type conversions would be expected under the R&PP lease. A total of 2,318 acres of suitable habitat, including four parcels with California Gnatcatcher records, would be sold or exchanged and would be impacted by probable development. An additional 1,866 acres of suitable habitat, including three parcels with recent California Gnatcatcher records, would be available for protective transfer where minimal habitat disturbance would result.

Impacts from mineral resources development is expected on up to 32 acres contained within seven parcels. In addition, the areas surrounding these mining sites would be impacted by noise, traffic, etc., so that the total area lost to California Gnatcatcher is estimated at 26 acres per well or 150 acres for total development.

Conclusion: This alternative would have a highly negative impact to California Gnatcatcher relative to the total amount of habitat on BLM-administered land. Of the 5,084 acres of suitable habitat administered by BLM within the planning area, 46% would be sold or exchanged and impacted by probable development, 6% would be leased under the R&PP Act, 36% would be available for protective transfer and 12% would be retained. None of the eight parcels known to support California Gnatcatcher would be retained, although five would be available only for protective transfer or R&PP lease, where the habitat would be protected from significant disturbance. Regional impacts to this bird would be moderated by the fact that a limited amount of overall habitat is on land administered by the BLM. Impacts to this species from mining would be negligible because of the limited acreage involved. Cumulative impacts to California Gnatcatcher would be moderately negative under this alternative.

**Orange-throated Whiptail.** Refer to Alternative 1 for a discussion of the current status of this lizard.

Orange-throated whiptails have been recorded recently on nine BLM parcels containing 4,316 acres within the planning area. These nine parcels are widely dispersed throughout southwestern Riverside County and eastern San Diego County. In this alternative, six of these parcels (1,124 acres) would be sold, and one parcel (40 acres) would be available for exchange. The habitat on these parcels would likely be impacted by subsequent development. Two parcels (3,152 acres) would continue under an R&PP lease or be available for protective transfer where disposal would be conditioned on protection of the habitat or where minimal development is expected. In this alternative, one of the parcels (841 acres) with probable occurrence of this lizard would be retained under BLM administration and three (757 acres) would be exchanged for BLM acquisitions elsewhere. Habitat removed from BLM public ownership through R&PP lease or protective exchange is not expected to undergo any major vegetation type conversion, hence impacts to the orange-throated whiptail in these instances are expected to be minimal.

Negative impacts to orange-throated whiptail from mineral development are expected to occur on up

to 32 acres included within seven parcels; these impacts would not be significant.

Conclusion: Of nine parcels (4,316 acres) with recent records, none would remain under BLM management. The majority of the acreage (3,152 acres), however would remain under some protective management. The remaining 1,164 acres would be sold or exchanged and subject to the impacts associated with the development of land. Although the cumulative negative impacts of this alternative would be high in relation to BLM-administered lands, they would not be regionally significant.

**Southwestern Pond Turtle.** Brattstrom and Messer (1988) in their report to the California Department of Fish and Game stated that this turtle is currently found in only a few widely separated localities.

The authors suggest several locations as possible areas for southwestern pond turtle management/mitigation-compensation. None of the recommended management areas contain BLM lands. They also document a small population in Lake Wohlford; this would marginally include the adjacent parcels administered by BLM: 247-331 and 247-332, both of which would be sold or exchanged. Neither of these parcels are known to actually support pond turtles. In addition, the BLM administers 1.5 miles along the Santa Margarita River. This river is known to support southwestern pond turtles downstream, where they are associated with beaver ponds near Fallbrook. Beaver ponds also exist on the BLM-administered segments of the river and could support southwestern pond turtles. These parcels would be retained under this alternative.

Conclusion: Land disposal actions in this alternative and any subsequent development of those lands would not likely have any significant cumulative impact on southwestern pond turtles.

### **Game Species**

Existing habitat for mule deer would be impacted through the disposal and eventual development of up to 32,976 acres of potential deer habitat (parcels greater than 600 acres) administered by BLM. The recreational development of 10,913 acres of potential deer habitat through R&PP leases would also impact existing habitat for mule deer. Furthermore, 63,365 acres of quail habitat are subject to land disposal actions under this alternative. Up to 25% of these lands are expected to be developed eliminating 15,000 acres of potential quail habitat.

In addition to the losses of game habitat resulting from land tenure adjustments, it is anticipated that OHV use will impact game habitat. An increase in OHV use is expected on existing routes due to encroaching development and population growth. This increased use, coupled with the inability of law enforcement to provide continual patrol in a given area, would result in an increase in cross-county use.

Losses to game habitat would also occur as a result of mining activity. It is expected that up to 200 acres of game habitat would be lost from strip mining for tungsten or other mineral deposits in the southeastern portion of the Beauty Mountain Management Area. In addition, the areas surrounding these mining sites would be degraded by noise and traffic, disrupting movement patterns and creating an effective loss of 2,000 acres of mule deer habitat.

These impacts from land disposal, OHV use, and mineral development would not be offset by the exchange of existing BLM-administered parcels to consolidate public lands. The lack of consolidation would make vegetation management difficult. Nevertheless, it is expected that prescribed burning would encourage an increase of 1,120 acres of quality early seral vegetation over any 10-year period.

Conclusion: The loss of BLM-administered deer habitat through all actions considered in this alternative would be 46,740 acres. Partially offsetting these impacts is the expected increase of 1,120



acres of quality early seral vegetation over a 4,480 acres area during any 10-year period as a result of prescribed burning. In concert, this would equate to a net loss of 42,260 acres or 45% of the existing deer habitat on BLM-administered lands, and a possible net loss of up to 12% of the quail habitat administered by BLM. These habitat losses are expected to have a highly negative impact to mule deer populations, and a moderately negative impact to quail populations on BLM lands in the planning area. From a regional perspective, however, these cumulative impacts are not expected to be significant.

### Important Wildlife Habitat Types

For a general discussion of important habitat types, refer to Alternative 1.

**Coastal Sage Scrub.** In this alternative, a total of 5,052 acres (47% of the total 10,817 acres) of manageable coastal sage scrub (coastal sage scrub in blocks of 30 acres or more) would be sold or exchanged and could be impacted by subsequent development. An additional 4,028 acres (37%) of this habitat type would be available for protective disposal or are presently under R&PP lease. These parcels are not expected to undergo any significant changes to the vegetation communities. A total of 1,737 acres (16%) of the manageable coastal sage scrub would be retained under this alternative.

**Riparian Habitat.** In this alternative, 45.6 miles of riparian habitat (35% of the approximately 130 miles of riparian habitat) within the planning area would be sold or exchanged to the private sector. Of this total riparian area, 30.6 miles are considered as manageable riparian habitat (riparian segments administered by the BLM at least 0.5 miles in length). Full commercial development of sand and gravel resources in the Agua Dulce area would destroy as much as 3 miles of unclassified riparian habitat. In addition, 24.4 miles (19%) of the total riparian habitat (20.9 miles of manageable riparian habitat) would either be leased under the R&PP Act or would be available for some protective transfer. On these parcels, either disposal would be conditioned on protection of the habitat or on minimal development, and no significant disruptions of the natural vegetation communities are expected. The remaining 60.2 miles (46%) of total riparian habitat (59.4 miles of manageable riparian habitat) would be retained by BLM in this alternative.

Impacts to riparian and coastal sage scrub communities would result from OHV use. These expected impacts would result from the physical damage to plants within these communities, and from accelerated soil erosion due to OHV use. Increased OHV use is expected to accompany encroaching development and population growth, resulting in additional unplanned routes of travel and an increase in cross-county use.

Conclusion: Overall, a net loss of both coastal sage scrub and riparian communities would occur under this alternative. A total of 47% of the manageable coastal sage scrub in the planning area would be sold or exchanged; 37% would be available for protective disposal, including R&PP leases; 16% would be retained under BLM management. A total of 27% of the manageable riparian habitat in the planning area would be sold or exchanged; 19% would be available for protective disposal, including R&PP leases; 54% would be retained under BLM management. The expected cumulative negative impacts to riparian and coastal sage scrub communities under this alternative, while significant relative to BLM-administered lands, would not be regionally significant.

### Impacts to Vegetation

#### State-Listed Species

**Dunn's mariposa lily (*Calochortus dunnii*).** The impacts of this alternative would be the same as those described in Alternative 1.

**Munz's onion (*Allium fimbriatum* var. *munzii*).** Approximately 10% of the potential habitat for this species (in the Steele Peak area) would be sold or exchanged to the private sector and could be impacted by development. For the reasons explained in Alternative 1, the loss of this potential habitat on BLM-administered land would represent a significant negative cumulative impact on this species.

**Nevin's barberry (*Mahonia nevinii*).** The impacts of this alternative would be the same as those described in Alternative 1.

**San Diego thornmint (*Acanthomintha ilicifolia*).** The impacts of this alternative would be the same as those described in Alternative 1.

**Slender-pod jewelflower (*Caulanthus stenocarpus*).** The impacts of this alternative would be the same as those described in Alternative 1.

#### **BLM-Sensitive Species**

**Cleveland goldenstars (*Muilla clevelandii*).** Approximately 15% of the potential habitat for this plant would be sold to the private sector in this alternative. This includes, habitat in the proximity of Poppet Flat and a 40-acre parcel containing potential habitat west of Otay Mountain. The impacts associated with the development of lands transferred into private ownership combined with the more minor impacts resulting from OHV-related degradation of the potential habitat along existing routes in the Poppet Flat area, would represent a significant negative cumulative impact, since most of the potential habitat for this species is located on BLM-administered lands.

**Dense reed grass (*Calamagrostis densa*).** The impacts of this alternative would be the same as those discussed in Alternative 1.

**Felt-leaved monardella (*Monardella hypoleuca* ssp. *lanata*).** The impacts of this alternative would be the same as those discussed in Alternative 1.

**Gander's pitcher sage (*Lepechinia ganderi*).** The impacts of this alternative would be the same as those discussed in Alternative 1.

**Jacumba locoweed (*Astragalus douglassii* var. *perstrictus*).** Approximately 30% of the potential habitat on BLM-administered land, primarily in the La Posta area, would be sold to the private sector. Although this species has been observed in the Cleveland National Forest, the loss of potential habitat in the La Posta area would represent a significant negative cumulative impact, since this species is solely restricted to southeastern San Diego County in the Jacumba area.

**Johnston's rock cress (*Arabis johnstonii*).** All of the potential habitat for this species on BLM-administered land, contained in two small parcels, would be sold. The cumulative impact of this alternative would not be significant, as explained under Alternative 1.

**Many-stemmed dudleya (*Dudleya multicaulis*).** Under this alternative, the impacts would be similar to those discussed in Alternative 1, except that only approximately 10% of potential habitat would be sold to the private sector. This is not expected to represent a significant negative cumulative impact.

**Narrow-leaved nightshade (*Solanum tenuilobatum*).** The impacts of this alternative would be the same as those discussed in Alternative 1.

**Orcutt's brodiaea (*Brodiaea orcutti*).** The impacts of this alternative would be the same as those discussed in Alternative 1.

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**Orcutt's linanthus (*Linanthus orcutti*).** Potential habitat on BLM-administered lands would be reduced by 30% through the proposed sale of land in the Sky Oaks area. Because known populations occur to the west in the Cleveland National Forest, and to the east in Anza-Borrego Desert State Park, and because these known populations are likely to be protected in the future, there would be no cumulative impact under this alternative.

**Palmer's grapplinghook (*Harpagonella palmeri* var. *palmeri*).** The impacts of this alternative would be the same as those discussed in Alternative 1.

**Parrys' tetracoccus (*Tetracoccus diocus*).** The impacts of this alternative would be the same as those discussed in Alternative 1.

**Payson's jewelflower (*Caulanthus simulans*).** In addition to the impacts listed in Alternative 1, potential habitat in the La Posta area of San Diego County would also be sold, bringing the total potential habitat loss on public lands to approximately 20%. For the reasons given under alternative 1, the cumulative impact of this alternative would not, however, be significant.

**San Diego barrel cactus (*Ferocactus viridescens*).** The effects of this alternative would be the same as those discussed in Alternative 1.

**San Diego currant (*Ribes canthariforme*).** The effects of this alternative would be the same as those discussed in Alternative 1.

**San Diego rattleweed (*Astragalus oocarpus*).** All of the potential habitat on BLM-administered lands, contained in three small parcels adjacent to the Cleveland National Forest, would be sold. Since most known populations and the greatest part of the potential habitat for this species are located within that national forest, and are likely to be protected in the future, the cumulative impact would not be significant.

**San Felipe monardella (*Monardella nana* ssp. *leptosiphon*).** In addition to the impacts discussed for this species in Alternative 1, approximately 5% of the potential habitat on BLM-administered lands, in the Previtt Canyon area, would be sold. Since most of this species's potential range and known occurrences are located within the Cleveland National Forest, and are not likely to be disturbed in the future, the cumulative impact would not be significant.

**San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*).** The impacts of this alternative would be the same as those discussed in Alternative 1.

**Tecate cypress (*Cupressus forbesii*).** The impacts of this alternative would be the same as those discussed in Alternative 1.

**Tecate tarplant (*Hemizonia floribunda*).** The impacts of this alternative would be the same as those discussed in Alternative 1.

**Variegated dudleya (*Dudleya variegata*).** The impacts of this alternative would be the same as those discussed in Alternative 1.

**Conclusion:** This alternative would have no impact on any federally listed species. It would have significant negative cumulative impacts on the potential habitats for three state-listed species: Munz's onion, Nevin's barberry, and San Diego thornmint. This impact is due to the sale of BLM-administered land which ultimately results in habitat loss due to development. The impact of this loss is especially significant because most of the habitat for these species occurs on private lands which

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are subject to development. This alternative would also have significant cumulative impacts on the populations of eight BLM-sensitive species: Gander's pitcher sage, Palmer's grapplinghook, Parry's tetracoccus, San Diego barrel cactus, San Diego currant, Tecate cypress, Tecate tarplant and variegated dudleya, as well as potential habitats for two others: Cleveland goldenstars and Jacumba locoweed. All but one (Palmer's grapplinghook) are candidates for federal listing. It may also impact the potential habitat of the San Fernando Valley spineflower in the Hasley Canyon area. In all cases, these species and/or their potential habitats would be impacted because they occupy areas of the South Coast Planning Area that are not, for the most part, protected and that are likely to be developed in the future (i.e., mostly lowland areas of private lands near cities, towns, or highways).

### **Sensitive Plant Communities**

**Coastal and Valley Freshwater Marsh.** The impacts on this plant community would be the same as those discussed in Alternative 1.

**Freshwater Seep.** The impacts on this plant community would be the same as those discussed in Alternative 1.

**Engelmann Oak Woodland.** The impacts on this plant community would be the same as those discussed in Alternative 1.

**Riversidean and Diegan Sage Scrub.** See the Wildlife section under Impacts to Important Wildlife Habitat Types for a discussion of the impacts of this alternative on these communities.

**South Coast Live Oak Riparian Forest.** From a total of 33.2 miles of riparian habitat where this community is the dominant vegetation type, 15.2 miles (46%) would be sold or exchanged to the private sector, where it would be subject to development. A total of 2.8 miles (8%) would be available for protective transfer where disposal would be conditioned on protection of the habitat or minimal development is expected. The remaining 15.2 miles (46%) of oak riparian forest would be retained. Although this riparian community is also found on U.S. Forest Service lands, where it is likely to be protected in the future, the development of a substantial portion of the disposed land would represent a major loss of this type of community at intermediate elevations. Therefore, the cumulative impact would be negative and significant.

**Southern Cottonwood-Willow Riparian Forest.** From an estimated 3 miles of riparian habitat where this community is the dominant vegetation type, approximately 2 miles (66%) would be sold or exchanged to the private sector and could be ultimately developed. A total of 0.9 miles (29%) of this community is located on parcels that would be available for protective transfer where disposal would be conditioned on the protection of the habitat or where minimal development is expected. Only 0.1 miles (4%) of this riparian community would be retained under this alternative. This would represent a significant negative impact. Even though this type of riparian forest occurs along streams throughout the south coast mountain ranges (Holland 1986), including drainages within several national forests where it would likely be protected in the future, this community is nevertheless expected to be significantly impacted by this alternative. This is because of the relatively large impact that land actions and subsequent development would have on this community in the lower elevations of its range, where most occurrences have already or are likely to be disturbed or eradicated by development of private lands.

**Southern Interior Cypress Forest.** The impacts on this plant community would be the same as those discussed in Alternative 1.

**Southern Sycamore-Alder Riparian Woodland.** All of the estimated 0.5 miles of riparian habitat would be sold or exchanged where this community is the dominant vegetation type; this habitat would

be subject to future development. Even though this community occurs along streams throughout the south coast mountain ranges (Holland 1986), including drainages within several national forests where it would likely be protected in the future, this impact is nevertheless expected to be negative and cumulatively significant.

**Southern Willow Scrub.** From a total of 9.2 miles of riparian habitat where this community is the dominant vegetation type, 2.8 miles (30%) would be sold or exchanged to the private sector and would be subject to development. Approximately 5 miles (56%) would be available for some protective transfer, and the remaining 1.3 miles (14%) would be retained. Because this community has been, and will likely continue to be, reduced by urban expansion, flood control, and channel improvements (Holland 1986) elsewhere in the South Coast Planning Area, the impacts associated with development of lands transferred from federal ownership would represent a significant negative cumulative impact.

**Other Riparian Communities.** From an estimated 30 miles of unclassified riparian forest community and 53 miles of unclassified riparian community, approximately 11.9 miles (40%) and 13.2 miles (25%) respectively, would be sold or exchanged to the private sector. A total of 8.8 miles (29%) of unclassified riparian forest and 5.3 miles (10%) of unclassified riparian habitat would be available for protective transfer. Approximately 9 miles (30%) of unclassified riparian forest and 34 miles (64%) of unclassified riparian communities would be retained. The loss of riparian forest from federal ownership may include additional losses of South Coast Live Oak Riparian Forest community.

Conclusion: This alternative would have significant negative cumulative impacts on the following sensitive plant communities: Coastal and Valley Freshwater Marsh, South Coast Live Oak Riparian Forest, Southern Cottonwood-Willow Riparian Forest, Southern Interior Cypress Forest, Southern Sycamore-Alder Riparian Woodland, and Southern Willow Scrub.

## Impacts to Open Space Values

The primary impact to open space values would result from the disposal and subsequent development of lands. Under this alternative, it is expected that approximately 46,935 acres of public land, of which 65% is rated either as having high or medium open space values, would be sold or exchanged and eventually developed. This impact would be compounded by the projected growth and development of private land with the loss of open space.

For the most part, open space values are expected to be maintained on 81,527 acres of which 70% is rated as high or medium for open space values. These lands would either be retained under BLM management, maintained under R&PP lease, disposed of with protective conditions, or identified for transfer to the U.S. Forest Service. Open space values on these lands may be affected by actions such as prescribed burning or mineral exploration/development. The impacts of prescribed burning would be minimal and of short duration. Impacts from the expected levels of mineral activity would also be negative but not significant.

Conclusion: Overall, open space values would be maintained on 81,527 acres, including 59,939 acres of public land rated as having high or moderate open space value. Land ownership adjustments, however, would negatively affect open space values through disposal and subsequent development 46,935 acres, including 30,381 acres rated as high or moderate in open space value.

## Impacts to Recreation Use

This alternative will result in the transfer or disposal of many BLM-administered lands with recreation potential. The loss of these lands will eliminate both current and potential future uses on those parcels. Current users will be displaced to other areas offering similar types of opportunities.

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No easements are currently identified for acquisition for recreational purposes, so potential legal access to public lands will not be provided, either for motorized or nonmotorized uses.

The OHV designations on most of the lands will provide opportunities for motorized vehicle use, limited to existing routes, as long as the lands remain under federal management. As a result of disposal actions the available mileage of motorized recreational trails will drop from the existing 260 to 124 miles.

No visitor services will be provided, and in the absence of information directing recreationists to public land, use levels will remain low.

Vegetation manipulations will marginally increase recreational opportunities for deer and quail hunting and for nature study, and will cause short term negative impacts to scenic values.

Overall, recreation use is expected to increase slightly from the existing level of 37,000 to 42,000 VUD as a result of urban expansion and increasing population growth. Retained parcels will show slightly increased concentrations of users, with an increasing potential for recreational conflicts. The amount of use expected in this alternative is considered insignificant in the context of the total outdoor recreation usage in the planning area.

Conclusion: Alternative 2 does nothing to benefit the recreating public, or to utilize existing recreation resource potential. Increases in public recreation use from 37,000 to 42,000 VUD can be attributed strictly to urban expansion and population growth, and additional user conflicts can be expected. The loss lands through disposal including lands with 136 miles (52%) of motorized vehicle routes, and continued lack of legal public access to the retained lands would be a significant loss given the potential use levels and existing demand for motorized vehicle touring opportunities.

### Impacts to Mineral Development

Impacts to mineral development would result from restrictions placed on development activities and from the disposal of lands with mineral potential, since their subsequent land use developments interfere with the development of mineral resources.

Oil and gas leasing stipulations under this alternative would increase development costs in some instances. Development of known reserves would not be precluded, although drilling of exploratory wells may be hampered due to application of No Surface Occupancy Stipulations.

Land tenure adjustments under this alternative are expected to result in the disposal of surface lands with acreage of moderate and high potential for mineral resources as shown in Table 4-3.

Impacts from land tenure adjustments will vary depending on the lands acquired and the condition under which the mineral resources are protected (i.e. recovery of fair market value, reservation, or exchange of mineral rights).

Conclusion: Impacts to potential mineral development would result from the disposal of surface lands with mineral potential. Impacts would be low for gold, gemstone/dimension stone, and miscellaneous metallic and non-metallic mineral commodities, and high for sand and gravel resources. Oil and gas leasing stipulations would increase development costs for new leases and complicate exploratory efforts.

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**Table 4-3. Mineral Potential of Lands Available for Disposal**

Resource	Total Acres on BLM Surface	Acres Disposed	Percentage Reduction
Gold	24,490	2,272	9.2%
Gemstone & Dimension stone	11,931	2,591	21.7%
Metallic and non- metallic	30,982	5,373	17.13%
High Potential Sand and Gravel	8,852	4,832	54.6%
Moderate Potential Sand and Gravel	71,183	13,648	79.4%

### Impacts to Paleontologic Resources

The impacts of this alternative are the same as described for Alternative 1 (refer to page 4-22).

### Impacts to Kuchamaa (Native American Religious Values)

Disposal of Kuchamaa (Tecate Peak) and Little Tecate Peak would result in negative impacts to Native American religious values. Past impacts to these peaks include disturbance of the peaks by communication facilities, and residential development at the base of these mountains, thus negatively impacting the viewshed, which is part of the religious perception/experience of the peaks. Kuchamaa, which was recently nominated to the National Register of Historic Places because of its Native American religious values, would no longer be protected under federal law. Disposal of these mountains would cause significant negative cumulative impacts due to the continued foreseeable development of private land on Kuchamaa and Little Tecate Peak.

The vegetation management actions (prescribed burning) and levels of recreation use anticipated under this alternative are not expected to negatively affect Kuchamaa.

Conclusion: The disposal and subsequent development of Kuchamaa and Little Tecate Peak would have a negative and significant impact on Native American religious values.

### Impacts to Watershed (Beauty Mountain Management Area)

Approximately 150 acres (3%) of the sensitive watershed area would be degraded by tungsten mining and related activities in the Beauty Mountain Management Area. Soil erosion, stream bank deterioration, and downstream siltation would increase and impact the lower reaches of the watershed southwest of the Pawnee Mine site.

Conclusion: The Beauty Mountain watershed is one of the few pristine watersheds still found on public lands. Given the importance of this particular watershed for local water resources, this alternative would have a negative, significant cumulative impact on soil and water resources.

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### Reasonably Foreseeable Development

#### Lands Actions

Regional land use and growth projections are the same as described for Alternative 1.

A total of 20,949 acres would be available for disposal through exchange or sale. Reasonably foreseeable development following transfer from federal ownership for 71% (14,956 acres) of these lands would be predominantly for residential use, in accordance with local government land use plans, with a density of one dwelling unit or more per forty acres. For 29% (5,993 acres) of the lands, however, either disposal is conditioned on protecting sensitive resources or extensive development is not expected even if the lands are transferred from federal ownership. The expectations for these lands are described below:

1. A total of 30 parcels (4,367 acres) are available for exchange only for the purpose of fulfilling in part the acquisition of 9,600 acres of BLM public land identified for the Steele Peak Reserve and proposed ACEC in this alternative. These 30 parcels (4,367 acres) include 12 parcels (1,862 acres) within Stephens' kangaroo rat (SKR) Reserve Study Areas other than Steele Peak, 10 parcels (1,469 acres) with documented SKR presence and 8 parcels (1,036 acres) with identified SKR habitat. These exchanges would consolidate public ownership surrounding four existing parcels (1,540 acres) of BLM public land within the Steele Peak Reserve. Some of the other SKR Reserve Study Areas which contain the 12 parcels (1,862 acres) of BLM public land slated for use in land exchanges may ultimately be selected as SKR Reserve Areas. It is expected that BLM parcels within these selected SKR Reserves will be exchanged to the Riverside County Habitat Management Agency to achieve the BLM public land acquisitions at Steele Peak.
2. One 200-acre, with a recent record of the federally endangered Least Bell's Vireo, is identified for disposal only if the habitat would be protected.
3. One 50-acre parcel, identified as having potential for occurrence of the federally endangered slender-horned spineflower, is available for disposal only if surveys reveal that slender-horned spineflower plants are not present.
4. Six parcels, containing 740 acres in San Diego County, are currently leased by local government agencies under the Recreation and Public Purpose (R&PP) Act or are covered by existing lease applications. It is expected that these lands will be used in accordance with development plans which primarily call for the construction of recreation staging areas and trails for non-motorized use.
5. Five of the parcels near Castaic Lake in Los Angeles County, with a total of 686 acres, are expected to be transferred to the California State Department of Water Resources under the R&PP Act. Development of these parcels will be limited to the provision of facilities for recreational use.

In addition to the lands identified above, a total of 14,437 acres are identified for consolidation exchange in the Beauty Mountain Management Area and the San Diego County Management Area. It is expected that a portion of these lands will be exchanged to acquire nearby lands which possess



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similar acreage with comparable or more sensitive resource values.

Land acquisitions identified for this alternative are as follows:

Otay Mountain inholdings - 500 acres	Santa Margarita ACEC - 300 acres
Hauser Mountain inholdings - 800 acres	Oak Mountain vicinity - 640 acres
Cedar Canyon ACEC - 280 acres	Valle Vista vicinity - 300 acres
McAlmond Canyon vicinity - 580 acres	Badlands vicinity - 1,000 acres
Kuchamaa ACEC - 500 acres	Beauty Mountain area consolidation - up to 9,141 acres
Steele Peak ACEC - 9,600 acres	Santa Clara River corridor - up to 6,000 acres

It is also expected that additional lands may be acquired to enhance management of the sensitive species and riparian values of parcels in the vicinity of Fern Creek, De Luz Creek, Rainbow Creek, and the Santa Margarita River.

### Recreation Actions

Three Special Recreation Management Areas (SRMAs) will be identified; these will be designated at Beauty Mountain, the (U.S.-Mexico) border mountains area, and Poppet Flat.

The OHV designation will be limited to existing routes of travel except in the following areas:

- Kuchamaa ACEC - limited to a single existing open route
- Cedar Canyon ACEC - closed
- Fern Creek - closed
- Canyon Lake - limited to two miles of route
- Agua Tibia WSA - closed
- Valle Vista - closed
- Oak Mountain - closed
- Santa Ana River wash - closed
- Santa Margarita River - closed

Following the loss of some existing vehicle routes through disposal of parcels and the gain of others through acquisition of lands and motorized recreational access easements, it is expected that the current length of available vehicle route will decrease slightly from 260 miles to 253 miles. It is expected, however, that overall access to the larger blocks of public lands will be improved. The miles of route lost through disposal will predominantly be made up of short segments often with no current legal access.

A number of developed facilities will be constructed under this alternative. Included will be four campgrounds, one each at Otay Mountain and Hauser Mountain, and two at Beauty Mountain. Two of these campgrounds will be limited to nonmotorized access.

Three administrative sites will be developed, one each at Otay Mountain, Poppet Flat, and Beauty Mountain.

Five interpretive displays will be developed, one each at Otay Mountain, Tecate (Kuchamaa), Hauser Mountain, and Beauty Mountain, and Poppet Flat. Visitor services will be provided, including the developed facilities, signs, maps, guides, other materials, and regular management presence and contacts.

Recreation use levels will increase from the existing 37,000 to 161,000 VUD by the year 2000. Losses from the limited disposal of lands will be more than offset by increased use resulting from land acquisitions, the development of facilities, provision of access, new visitor services, and urban expansion and population growth.

## **Mineral Development**

**Sand and Gravel Development.** The ACECs to be designated under this alternative (a total of 12,219 acres) would be closed to mineral material sales. Development activity, however, is not expected to differ from that described for Alternative 1, since most of the ACECs at best have moderate potential for occurrence of sand and gravel resources. The Santa Ana River Wash ACEC (760 acres) has known sand and gravel resources, but is considered unavailable for material sales even without ACEC designation due to the presence of two federally endangered plant species.

**Oil and Gas Development.** Reasonably foreseeable development of oil and gas is expected to be very similar to that described for Alternative 1. It is expected, however, that the application of stipulations for no surface occupancy stipulations to additional areas will change the locations and/or methods of some of the exploratory drilling. The total amount of drilling activity and related surface disturbance, however, is expected to be the same.

**Locatable Mineral Development.** In most areas, development of locatable mineral resources is expected to be the same as described for Alternative 1. In the Riverside-San Bernardino County Management Area, however, exploration for gold resources will gradually decline over the next ten years as some lands are transferred out of federal ownership and other lands within the Steele Peak ACEC are withdrawn of from mineral entry.

## **Vegetation Management Actions**

Under this alternative 8,000 acres of controlled burns would be conducted to benefit wildlife over a ten-year period. Management emphasis in the Hauser Mountain and the Beauty Mountain area would be on deer and quail management, using spot burns to maximize beneficial edge impacts between plant communities. Approximately 4,000 acres of prescribed burns would be conducted within contiguous acreage in or adjacent to the Hauser Mountain Wilderness Study Area. This area contains the eastern portions of both Potrero (No. 07046) Allotment and Hauser Mountain (No. 07024) Allotment, and approximately 4,000 acres within and adjacent to the Beauty Mountain (No. 06009) Allotment. A limited amount of burning would also occur in the existing Otay Mountain (No. 07035) Allotment and the Clover Flat (No. 07012) Allotment areas assuming successful consolidation of lands within and/or adjacent to these allotments. It is assumed that there will be a five-year forage viability period after burning with 80% of the additional forage being available and used by wildlife.

In addition to the planned increase in prescribed burning for wildlife the average number of acres burned in the Otay Mountain area would be reduced from 1,000 acres as prescribed in the Otay Grazing EIS to 700 acres and limited to the western part of the allotment, while the size and frequency of burns on Tecate Peak would be decreased. These fire management levels have been adjusted in response to the management needs of Tecate cypress in the Otay Mountain and Tecate Peak areas. It is expected that these management levels would be realized from a combination of more efficient fire prevention/suppression and prescribed burns. On Otay Mountain the average 50-year fire frequency would be maintained. On Tecate Peak, an aggressive fire suppression program

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would be implemented until the threshold year of 2020. After that time fire perturbations for the 75-acre cypress stand would be by prescribed burn only and a 50-year average fire rotation would be maintained through fire suppression and prescribed burning.

All prescribed burns would follow the project design restrictions outlined in the Otay Grazing EIS. These restrictions include:

- Prescribed burns will be planned under prescribed constraints that will assure minimum damage to plant cover, soil, and riparian systems.
- Prescribed burns will be implemented only after an approved burn plan has been developed.
- Burns for improving wildlife habitat could be accomplished on either potentially suitable or unsuitable sites for livestock.
- Prescribed burns for increasing livestock forage production will be carried out only on sites suitable for type conversion as identified by the Soil Conservation Service.
- Prescribed burning shall take place only on days designated as a "burn days" by the South Coast Air Quality Management District (SCAQMD) and/or the San Diego Air Pollution Control District (SDAPCD).

Refer to Appendix G, Table G-2, for a complete list of restrictions.

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### Impacts to Wildlife

#### Federally Listed or Proposed Species

**Unarmored Three-spined Stickleback.** Refer to Alternative 1 (4-11), for a discussion of the current status of the fish species.

This endangered fish does not occur on BLM-administered land. Its range within the Santa Clara River is, however, adjacent to several small BLM parcels, and is downstream from 2,819 acres of BLM surface land and 21,806 acres of subsurface mineral estate with high to medium potential for aggregate material extraction and/or oil and gas development. The reasonably foreseeable development of these resources over the next 20 years is expected to result in the disturbance of up to 600 acres for sand and gravel extraction and the development of 100 oil and gas wells. This puts the species in a position of potentially being affected from secondary impacts related to oil spills and sand and gravel extraction, including increased sediment loads.

Conclusion: Mineral development would have a negative, but not significant, impact on unarmored three-spined stickleback. State requirements, BLM standard stipulations and a controlled surface occupancy stipulation on upstream areas would control the indirect impacts to three-spined stickleback in the typical development scenario. It is expected that the successful acquisition of up to 6,000 acres along the Santa Clara River would produce a positive and significant impact to this species and would completely overshadow the expected negative, but not significant, impact to unarmored three-spine stickleback expected from mineral resource development. Overall, the cumulative impact of this alternative on stickleback would be positive and significant.

**California Condor.** Refer to Alternative 1 for a discussion of the current status of this bird.

The expected development of 3,596 acres as a result of disposal actions in this alternative would include the disposal of 442 acres of the 780 acres of condor core range administered by BLM. An additional 3,073 acres within the area identified as the limit of the condors' main range would also be impacted by expected low density development (one dwelling unit per 40 acres).

The development of sand and gravel resources on federal mineral split-estate in the management area is expected to impact a maximum of 600 acres of potential habitat (habitat outside of the core area) of the California Condor. At present, 18% of the identified condor habitat within the planning area has been classified as having a moderate to high potential for oil and gas development. Oil and gas development on BLM-administered lands is expected to create 100 acres of new surface disturbance in association with well drilling and ancillary facilities. Approximately 50% of the drilling activity will occur in existing oil fields within the area delineated as condor core habitat.

Conclusion: Impacts to condors from the land tenure adjustments proposed in this alternative are expected to be negative but not significant due to: (a) the small size of the parcels identified for disposal, (b) the extremely small acreage involved relative to the condor's identified core and home range area, and (c) the limited opportunity for residential development on most of the parcels due to topography. Of the more than 900,000 acres of identified California Condor habitat within the management area, a maximum of 700 acres, with BLM subsurface mineral estate, would be impacted through the development of mineral resources. Of this 700 acres, only 50 acres would occur within the area identified as core habitat and this would be within an already existing oil field. Consequently, cumulative impacts to California Condors would be negative but not significant.

**Stephens' Kangaroo Rat.** Refer to Alternative 1 for a discussion of the current status of this species.

In this alternative, the BLM would pursue acquisition, through exchange, of the entire Steele Peak Reserve. Twenty-three parcels, including 12 parcels (1,862 acres) within other reserve study areas and 11 other parcels (1,958 acres) containing 296 acres of occupied habitat (Montgomery 1989, RECON 1990), would be available for exchange for the sole purpose of acquiring 9,600 acres within the proposed Steele Peak Reserve. These exchanges would consolidate public ownership around four existing parcels (1,540 acres) of BLM public land within the Steele Peak reserve study area.

The 12 BLM parcels, within other reserve study areas, would be exchanged to other government agencies or groups acting on behalf of the reserve system to ensure the protection of SKR habitat. These parcels contain 1,862 acres and include 447 acres of known habitat and an additional 7 acres of potential SKR habitat. Even if retained by the BLM, it is expected that the 11 parcels outside of reserve study areas would be surrounded by development within the next 15 years. The long-term viability of these isolated populations is doubtful. SKR habitat on these parcels would become further fragmented, with associated SKR populations becoming increasingly isolated and could be extirpated within the next 20 years.

OHV use of existing routes on lands retained by the BLM will increase with encroaching development and population growth. This increased use, coupled with the inability of law enforcement to provide continual patrol of a given area, would result in additional unplanned routes of travel and an increase in cross-county use. Impacts to Stephens' kangaroo rat would occur through direct mortality of individuals from burrow collapse and indirect impacts from habitat degradation. Based on the analysis of 760 acres of occupied habitat located outside of SKR Reserve Study Areas (identified in the Habitat Conservation Plan), less than six acres of new disturbance is expected over 20 years, resulting in the death of less than 12 animals (Hicks and Cooperrider 1977, Montgomery 1989, and O'Farrell and Uptain 1989, RECON 1990). Conversely, this level of OHV activity is expected to enhance opportunities for SKR movement/pioneering activity by increasing the number of dirt roads

linking SKR habitats to pockets of potential habitat.

Conclusion: This alternative would have a significantly positive impact on Stephens' kangaroo rat. The BLM would pursue the acquisition of the remaining lands within the Steele Peak Reserve (9,600 acres). In addition, BLM lands in other reserve study areas would be available only for inclusion in the reserve system. The 3,517 acres of occupied and potential habitat on BLM parcels outside of reserve study areas would be lost from BLM ownership. These parcels would, however, be exchanged for land within the Steele Peak Reserve. Habitat values on acquired lands are expected to be similar. No net loss of Stephens' kangaroo rat habitat under BLM administration is expected. In addition, the exchange of smaller isolated parcels for the larger block of coastal sage scrub within Steele Peak would enhance the manageability and long-term viability of BLM-administered SKR habitat. The anticipated increase in OHV use on parcels which remain in public ownership would have some minor negative short-term impacts on SKR through direct mortality, but the long-term impact would not be significant. Cumulative impacts to Stephens' kangaroo rat would be positive and significant under this alternative.

**Least Bell's Vireo.** Refer to Alternative 1 for a discussion of the current status of this bird.

Least Bell's Vireos have been recorded on only one parcel (190-321) administered by the BLM within the planning area. Several pairs were observed in April of 1988 on this parcel, in the Warm Springs drainage, a tributary of Murrieta Creek (G. Bell, pers. comm.). This parcel is isolated by development from the closest major subpopulation in the Santa Margarita River and is slated for protective transfer in this alternative.

Eighteen other BLM parcels contain 12.9 miles of riparian systems with well-developed understories (shrub willows were used as an indicator species) and are considered to be potential habitat. In this alternative, two of these parcels containing 3.2 miles of marginal potential habitat around Canyon Lake would be exchanged to consolidate land within the Steele Peak Reserve. These areas could be impacted by subsequent development. Three parcels containing 0.3 miles of suitable habitat would be available for sale or exchange. One other parcel containing 0.3 miles of potential habitat would be available for R&PP lease. The remaining twelve parcels, totaling 9.1 miles of potential habitat, would be retained; they contain some well-developed riparian segments, including three segments within the Santa Margarita River drainage (0.3 miles in Rainbow Creek, 1.4 miles along the Santa Margarita River and 0.9 miles in Fern Creek), and a 0.6 miles segment located three miles north of the Santa Margarita River.

The acquisition of a substantial amount of riparian habitat in this alternative would benefit Least Bell's Vireo. Suitable or potentially suitable habitat for Least Bell's Vireo would be acquired as part of a 6,000-acre acquisition along the Santa Clara River, along three miles of potential moderate quality habitat within the proposed Steele Peak Reserve, and along the Santa Margarita River where an undetermined amount of high quality nesting habitat occurs.

Conclusion: Although 28% of the potential habitat for Least Bell's Vireo on BLM lands would be sold or exchanged, virtually all of the best potential habitat administered by the BLM would be retained. In addition, the acquisition of riparian areas in this alternative would significantly increase the amount of suitable habitat administered by the BLM. It is likely that some of the acquired lands may support breeding populations of Least Bell's Vireo. The consolidation of habitat under public ownership would increase the manageability of riparian systems, including cowbird control, benefiting Least Bell's Vireo. Cumulative impacts to Least Bell's Vireo under this alternative would be significant and positive.

### **Candidate Species**

**Wright's Checkerspot Butterfly.** The only known population of this butterfly occurs in the vicinity

of Oak Mountain (Ballmer, pers. comm.). This species of butterfly is reported to be associated with both clay soils and a host plant, Dot-seed plantain (*Plantago erecta*).

The retention of existing BLM lands and the acquisition of 640 acres in the Oak Mountain area would protect both the larval food source and the habitat that the larval form of this species uses to avoid desiccation during drought periods. This would significantly enhance the survival opportunities for this butterfly by protecting foraging and climatal protection habitats for the only known extant population.

Conclusion: Acquisitions in Oak Mountain area under this alternative would have a highly significant and positive cumulative impact on Wright's checkerspot butterfly.

**California Gnatcatcher.** Refer to Alternative 1 for a discussion of the current status of this bird.

Based on key habitat components (coastal sage scrub with California sagebrush and California buckwheat), it is concluded that 36 public parcels within the planning area contain 5,084 acres of suitable habitat for this bird. California Gnatcatchers have been recorded recently on eight of these parcels. In this alternative, 2,856 acres of suitable habitat would be retained, including three parcels with recent California Gnatcatcher records. Four parcels (487 acres), two of which have California Gnatcatcher records, would be sold; three parcels (75 acres) with potential habitat would be utilized for exchanges to consolidate BLM land. The remaining 1,666 acres, including 3 parcels with California Gnatcatcher records, would be exchanged for land within the Steele Peak Reserve. Habitat that is sold or exchanged to the private sector would be subject to development. The impacts on habitat resulting from eventual development is offset by the acquisition, by BLM, of up to 9,600 acres in the Steele Peak Reserve. Coastal sage scrub is a dominant habitat type within the reserve. It is expected that at least some of this coastal sage scrub would be potential, if not occupied habitat for California Gnatcatcher. Consolidation within the reserve would probably not result in a net gain of this key habitat type under BLM administration. However, the exchange of smaller more scattered parcels with coastal sage scrub for the larger block of this habitat type within the Steele Peak Reserve would improve both the manageability and the long-term viability of BLM-administered coastal sage scrub.

Impacts from mineral resources development is expected on up to 32 acres contained within seven parcels. In addition, the areas surrounding these mining sites would be degraded by noise, traffic, etc., so that the effective area lost to California Gnatcatcher is estimated at 26 acres per developed well or 150 acres of total development.

Conclusion: This alternative would have a positive impact on California Gnatcatcher. Of the 5,084 acres of suitable habitat within the planning area, 10% would be sold or exchanged. An additional 33% would be exchanged to consolidate land in the Steele Peak Reserve and 1% would be available to consolidate of BLM land in the Border Mountains area of San Diego County. The habitat transferred to private ownership would be subject to development. A total of 56% of the suitable habitat would be retained. Although there will probably not be a net gain of suitable habitat under BLM administration, the exchange of small scattered parcels for larger blocks of this habitat will enhance the manageability and long-term viability of BLM-administered coastal sage scrub. Areas where coastal sage scrub would be acquired include the Santa Margarita River, the Badlands (east of the city of Riverside), Cedar Canyon, and O'Neal Canyon. Impacts to this species from mining would be negligible because of the limited acreage involved. Regional cumulative impacts to California Gnatcatcher would be positive but not significant under this alternative.

**Orange-throated Whiptail.** Refer to Alternative 1 for a discussion of the current status of this lizard.

Orange-throated whiptails have been recorded recently on nine BLM parcels containing 4,316 acres

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within the planning area. These nine parcels are widely dispersed throughout southwestern Riverside County and eastern San Diego County. In this alternative three of these parcels (554 acres) would be sold or exchanged, four parcels (930 acres) would be exchanged to consolidate land within the Steele Peak Reserve, and one parcel (2,832 acres) would be retained. In this alternative, three of the parcels (1,518 acres) with probable occurrence would be retained under BLM administration and one (80 acres) would be exchanged for BLM acquisitions elsewhere. Land acquisitions under this alternative particularly of coastal sage scrub habitat at Steele Peak, Santa Margarita River, the Badlands, Cedar Canyon, and O'Neal Canyon would have a positive impact.

Impacts to this lizard from mineral resources development are expected to occur on up to 32 acres included within seven parcels; these impacts would not be significant.

**Conclusion:** This alternative would have a low to moderate positive impact on orange-throated whiptail. The sale or exchange to the private sector of seven parcels (1,484 acres) of known habitat and the impacts related to eventual development are offset by the acquisition and consolidation of 11,600 acres, much of it coastal sage scrub habitat (primarily in the Steele Peak area, but also in four other locations of the planning area). The exchange of smaller parcels for larger blocks of suitable habitat would increase the manageability of whiptail habitat under BLM administration. The long-term impact is expected to be positive on BLM land. However, the cumulative impact to orange-throated whiptail is not expected to be significant regionally.

**Southwestern Pond Turtle.** Brattstrom and Messer (1988), in their report to the California Department of Fish and Game, stated that this turtle is currently found in only a few widely separated localities. The authors suggest several locations as possible areas for southwestern pond turtle management/mitigation-compensation. None of the recommended management areas contain BLM lands. They also document a small population in Lake Wohlford; this would marginally include the adjacent parcels administered by BLM: 247-331 and 247-332, both of which would be retained in this alternative. Neither of these parcels are known to actually support pond turtles. In addition, the BLM administers 1.5 miles along the Santa Margarita River. This river is known to support southwestern pond turtles downstream, where they are associated with beaver ponds near Fallbrook. Beaver ponds also exist on the BLM-administered segments of the river and could support southwestern pond turtles. These parcels would be retained under this alternative and the planned acquisition of 300 acres along the Santa Margarita River would ensure the long-term viability of this habitat. In addition, up to 6,000 acres are targeted for acquisition along the Santa Clara River in Los Angeles County. Some southwestern pond turtle habitat would be included in this acquisition.

**Conclusion:** The acquisition of portions of the Santa Margarita River and Santa Clara River would result in a positive and significant cumulative impact to southwestern pond turtle populations.

### **Game Species**

Existing habitat for mule deer would be impacted through the disposal and eventual development of 2,836 acres of potential deer habitat (parcels greater than 600 acres) administered by BLM. Furthermore, it is expected that up to 25% (8,948 acres) of the 35,791 acres of potential quail habitat available for disposal would be impacted by eventual development.

In addition to the losses of game habitat resulting from land tenure adjustments, game habitat is also expected to be impacted by OHV use. An increase in OHV use is anticipated on existing routes due to encroaching development and population growth. This increased use, coupled with the inability of law enforcement to provide continual patrol in a given area, would result in an increase in cross-county use. This type of recreation, use coupled with the expected increase in visitor use days as a result of camp ground development, establishment of new trails, and easement acquisition, would create a disruptive and detrimental impact to resident large animal populations. It is estimated

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that less than two percent of existing deer range in the planning area would be impacted directly or indirectly by this activity.

Impacts to game habitat would also occur as a result of mining activity. It is expected that up to 200 acres of game habitat would be lost from strip mining for tungsten or other mineral deposits in the southeastern portion of the Beauty Mountain Management Area. In addition, the areas surrounding those mining sites would be impacted by noise and traffic, disrupting movement patterns and creating an effective loss of 2,000 acres of mule deer habitat.

These negative impacts from land disposal, recreation use, and mineral development would be offset by the expected acquisition of 21,501 acres to consolidate public lands. This consolidation would help facilitate prescribed burns to achieve an increase of 3,200 acres of quality early seral vegetation over a 12,800-acre area during any 10-year period.

**Conclusion:** A total of 6,718 acres of BLM-administered deer habitat would be impacted through all actions considered in this alternative. Offsetting these impacts is the expected acquisition of 21,501 acres to consolidate public lands. This consolidation would help facilitate prescribed burns, increasing quality early seral forage for wildlife. In concert, there would be a net gain of 27,583 acres (or a 29% increase) over the existing acreage of deer habitat on BLM-administered lands. Habitat gains are expected to have a highly positive cumulative impact to mule deer populations and quail populations relative to the extent of habitat used by these species on BLM lands in the planning area. From a regional perspective, however, impacts from this alternative are expected to be of low to moderate importance.

#### **Important Wildlife Habitat Types**

For a general discussion of important habitat types, refer to Alternative 1.

**Coastal Sage Scrub.** In this alternative, 4,244 acres (39%) of a total of 10,817 acres of manageable coastal sage scrub (coastal sage scrub in blocks of 30 acres or more) would be sold or exchanged and could be impacted by subsequent development. Offsetting the loss of this habitat from federal ownership is the acquisition of approximately 9,600 acres of primarily coastal sage scrub habitat in the Steele Peak Reserve. In addition, the acquisition of over 2,000 acres in the vicinity of the Santa Margarita River, the Badlands, Cedar Canyon, and O'Neal Canyon would include large blocks of coastal sage scrub. Actions proposed in this alternative will likely result in a substantial increase in the amount of coastal sage scrub administered by BLM. The exchange of smaller, scattered parcels with coastal sage scrub for the larger blocks of this habitat type within the Steele Peak Reserve and other areas would improve both the manageability and the long-term viability of BLM-administered coastal sage scrub.

**Riparian Habitat.** In this alternative, 20.7 miles of riparian habitat (16% of the approximately 130 miles of riparian habitat within the planning area) would be sold or exchanged and could be developed. Of this total riparian habitat to be disposed, 12.8 miles are considered as manageable riparian habitat (riparian segments 0.5 miles or more in length). A total of 14 miles of manageable riparian habitat would be acquired through acquisition/exchange actions in this alternative. Approximately 12 miles (9%) of the total riparian habitat (8.6 miles of manageable riparian habitat) would be available for R&PP lease or protective transfer where no significant disturbance of this community is expected. Throughout the planning area, 97.5 miles (75%) of the total riparian habitat in the planning area would be retained by the BLM in this alternative, which includes 90.2 miles of manageable riparian habitat.

In addition to impacts associated with lands actions, negative impacts to riparian and coastal sage scrub communities would result from OHV use. These expected impacts would result from physical



damage to plants within these communities, and from accelerated soil erosion due to increased OHV. Increases in OHV use of existing routes are expected to accompany encroaching development and population growth, resulting in additional unplanned routes of travel and an increase in cross-county use.

Conclusion: Overall, actions under this alternative would result in the sale or exchange of 39% of the manageable coastal sage scrub in the planning area; 9% would be available for some protective disposal or lease; and 52% would be retained. As a result of land acquisitions, however, the amount of coastal sage scrub habitat under BLM administration is expected to increase. BLM would be disposing of lands with approximately 4,244 acres of coastal sage scrub, but under this alternative BLM would be acquiring over 11,600 acres of land containing primarily coastal sage scrub habitat. The net gain of this habitat type under BLM management could result in at least a 50% increase in BLM coastal sage scrub within the planning area. The acquisitions proposed in this alternative represent a highly positive impact on coastal sage scrub habitats on BLM-administered lands. The cumulative impact of this alternative on this habitat regionally would not be significant.

Twelve percent of the manageable riparian habitat in the planning area would be sold or exchanged; 8% would be available for protective disposal or R&PP lease; and 80% would be retained by BLM. The acquisition of 14 miles of manageable riparian habitat would represent a net gain of 1.2 miles. On a regional basis, however, the cumulative positive impacts to riparian habitat would not be significant.

## **Impacts to Vegetation**

### **Federally Listed Species**

**Santa Ana River woolly-star (*Eriastrum densifolium ssp. sanctorum*).** The only known populations on BLM-administered land and most of the potential habitat for this shrub on BLM lands, would be managed within the Santa Ana River Wash ACEC for the conservation and recovery of this species. There would be a positive cumulative impact to this plant under this alternative.

**Slender-horned spineflower (*Dodecahema leptoceras*).** The only known populations on BLM-administered land, and all of the potential habitat for this annual on BLM lands, would be managed within the Santa Ana River Wash ACEC for the conservation and recovery of this species. Acquisition of potential habitat in the Valle Vista area would further enhance its conservation. There would be a positive impact to this plant under this alternative, and no negative cumulative impacts.

### **State-Listed Species**

**California orcutt grass (*Orcuttia californica*).** Potential habitat for this species on BLM-administered land would be reduced, by approximately 5% through the disposal of lands south of Steele Peak for acquisition of Stephens' kangaroo rat habitat within the Steele Peak area. Some potential habitat for California orcutt grass is likely to be acquired through these land exchanges, but a net loss is nevertheless expected. Because populations of this species have already been extirpated in Los Angeles County and are likely to become extirpated in southwestern San Diego County, impacts associated with land disposal actions in this alternative would result in a significant negative cumulative impact on potential habitat.

**Mexican flannel bush (*Fremontodendron mexicanum*).** Negative impacts on this species are expected from increased wildfire frequency at Otay Mountain and Tecate Peak combined with increased off-road vehicle activities, both due to increased accessibility. Aggressive fire suppression to keep fire rotations at a 40 to 50-year interval would keep these impacts to a level of non-significance. In addition, the creation of the Cedar Canyon ACEC/Research Natural Area would promote special management for the protection and recovery of this species. It is expected that there

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would be an overall positive impact under this alternative, and there would be no negative cumulative impacts.

**Munz's onion (*Allium fimbriatum var. munzii*).** Potential habitat for this species on BLM-administered lands would be reduced by approximately 10% through the disposal of lands west of Steele Peak used to acquire Stephens' kangaroo rat habitat within the Steele Peak area. Approximately the same amount of potential habitat for this species is likely to be acquired during this land action, and no net impact is expected as a result. Additionally, the creation of the Steele Peak ACEC/Research Natural Area and its withdrawal from mineral entries would promote management for the conservation of this species. There would, therefore, be no negative cumulative impacts under this alternative.

**Nevin's barberry (*Mahonia nevinii*).** Although some impact to potential habitat would occur in the Castaic Lake area from R&PP lease development and oil and gas exploration, the only known population on BLM-administered lands would be preserved at Oak Mountain. Acquisition of potential habitat at Oak Mountain as well as special management actions to conserve this species would benefit this species and enhance its recovery. On balance, this alternative would have a positive significant impact on this species.

**Slender-pod jewelflower (*Caulanthus stenocarpus*).** The exchange of lands in the Tule Valley area would reduce by 10%, overall, the potential habitat for this species on BLM-administered land. Very little potential habitat would be acquired as a result of these exchanges, so that a net loss of habitat in this region is expected. However, land exchanges in the southern San Diego area would result in a net increase of potential habitat for this species in the Dulzura-Potrero area. The net impact is expected to be insignificant. Because known populations and potential habitat within the Cleveland National Forest are not expected to be impacted in the future, and because acquisition of potential habitat in the Dulzura-Potrero area is expected to enhance conservation of this species, no cumulative negative impact is expected under this alternative.

#### **BLM-Sensitive Species**

**Johnston's rock cress (*Arabis johnstonii*).** The impacts of this alternative would be the same as those discussed in Alternative 2.

**Many-stemmed dudleya (*Dudleya multicaulis*).** The impacts of this alternative would be the same as those discussed in Alternative 1.

**Palmer's grapplinghook (*Harpagonella palmeri var. palmeri*).** Both the acquisition of potential habitat at Oak Mountain and special management actions to conserve this species and promote its recovery in the same area would have positive impacts under this alternative. There would be no negative cumulative impact under this alternative.

**Payson's jewelflower (*Caulanthus simulans*).** Potential habitat for this species on BLM-administered lands in the Tule Valley area, in various parts of the Riverside-San Bernardino Management Area, and in the La Posta area would be reduced overall by approximately 15%. Land acquisition just south of the La Posta area would partly compensate for habitat losses elsewhere. The known populations at Oak Mountain would be retained and managed for their conservation and recovery, and acquisition of potential habitat at Oak Mountain would further enhance the survival of this species in that area. Overall, this alternative is expected to have a significant positive impact on this species. There would be no cumulative negative impacts, since other populations on U.S. Forest Service lands are expected to be protected as well.

**San Diego rattleweed (*Astragalus oocarpus*).** The impacts of this alternative would be the same as those discussed in Alternative 2.

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**San Felipe monardella (*Monardella nana ssp. leptosiphon*).** In addition to the impacts described in Alternative 1, potential habitat on public lands would be reduced, overall, by approximately 10% through the exchange of the western part of the Beauty Mountain WSA. Acquisition of lands in the eastern part of the WSA would not compensate for the potential habitat transferred from federal ownership. In addition, less than 5% of the potential habitat would be impacted by an increase in wildfire frequency associated with a moderate increase in visitor use and recreational activities. However, since most of the potential range and known occurrences for this species are located within the Cleveland National Forest, and are not likely to be disturbed in the future, the cumulative impacts of this alternative would not be significant.

**San Fernando Valley spineflower (*Chorizanthe parryi var. fernandina*).** The impacts of this alternative would be the same as those described for Alternative 1.

**Tecate cypress (*Cupressus forbesii*).** The designation of Cedar Canyon as an ACEC/Research Natural Area would contribute to the conservation of this species. A moratorium on prescribed burning for livestock grazing objectives in the eastern portion of the Otay allotment would reduce the probability of escaped burns to impact the immature stands of this species before they reach reproductive age. Some increase in wildfire ignition frequency is expected due to increased recreational activities. Aggressive suppression and an emphasis on fire prevention/control through fuel reduction programs would reduce this impact to non-significance. Overall, this alternative is expected to have significant positive impacts on this species.

**Conclusion:** This alternative would enhance the conservation of two federally-listed species in the Santa Ana River wash area: the Santa Ana River woolly-star and the slender-horned spineflower. It would also benefit three state-listed species and/or their potential habitats: Mexican flannel bush, Munz's onion and Nevin's barberry. In addition, three BLM-sensitive species would benefit under this alternative: Palmer's grapplinghook, Payson's jewelflower, and Tecate cypress. This alternative would have, however, significant negative cumulative impacts on the potential habitat of California orcutt grass, a state-listed species. This is largely due to BLM land exchange actions resulting in habitat loss, while most other potential habitat would likely be impacted by continuing development of private lands in the planning area. It would also have significant negative impacts on the potential habitat for many-stemmed dudleya, a BLM-sensitive species. Actions under this alternative may impact the potential habitat of another BLM-sensitive species, San Fernando Valley spineflower, in the Hasley Canyon area of Los Angeles County.

#### Sensitive Plant Communities

**Engelmann Oak Woodland.** All of the estimated 45 acres of this community on BLM-administered lands would be subject to disposal actions in this alternative. Because most of this community type is located within the Cleveland National Forest, and is likely to be protected in the future, this would not represent a significant cumulative impact.

**Riversidean and Diegan Sage Scrub.** See the Wildlife section (refer to impacts to Important Wildlife Habitat Types) for a discussion of the impacts of this alternative on these communities.

**South Coast Live Oak Riparian Forest.** From a total of 33.2 miles of riparian habitat where this community is the dominant vegetation type, approximately 4.5 miles (13%) would be sold or exchanged to the private sector and would be subject to development. Another 3.0 miles (9%) of oak riparian forest would be available for some protective transfer, where disposal would be conditioned on protection of the habitat or minimal development is expected. A total of 25.8 miles (78%) of this community would be retained. Land acquisitions are expected to include a significant amount of this community to federal ownership. This alternative would have positive impacts on this community, with no negative cumulative impacts.

**Southern Cottonwood-Willow Riparian Forest.** From an estimated 3 miles of riparian habitat where this community is the dominant vegetation type, approximately 1.7 miles (55%) would be sold or exchanged to the private sector, and could be subsequently developed. Parcels containing 0.6 miles (19%) of this community would be available for some protective transfer (where disposal would be conditioned on protection of the habitat or minimal development is expected), and 0.8 miles (26%) would be retained. Even though this plant association occurs along streams throughout the south coast mountain ranges (Holland 1986), including drainages within several national forests where it would likely be protected in the future, this community is nevertheless expected to be significantly impacted by this alternative. This is because of the relatively large impact that land disposals and anticipated development would have on the lower elevations of this community's range, where most of it has or is likely to be disturbed or eradicated by the development of private lands.

**Southern Interior Cypress Forest.** The designation of Cedar Canyon as a ACEC/Research Natural Area would contribute to the study and long-term conservation of a fairly unique Sycamore/Cypress Riparian Forest community that also supports Mexican fremontia and Gander's pitcher sage. A moratorium on prescribed burns for livestock grazing objectives in the eastern portion of the Otay allotment would reduce the probability of escaped burns to impact the immature stands of this community before its reaches reproductive age. Some increase in wildfire ignition frequency is expected due to increased recreational activities. Aggressive suppression and an emphasis on fire prevention/control through fuel reduction programs would reduce this impact to non-significance. Overall, this alternative is expected to have significant positive cumulative impacts on this community, and no negative cumulative impact.

**Southern Sycamore-Alder Riparian Woodland.** In this alternative, all of the 0.5 miles of riparian habitat where this community is the dominant vegetation type would be sold or exchanged, and would be subject to development. These lands, however, would be available for exchange only to consolidate lands in the Border Mountains area of San Diego County. Land acquisitions in the Dulzura and McAlmond Canyon area of the San Diego County Management Area include more viable and manageable acres of this community than would be lost through disposal. Because of these acquisitions, land actions in this alternative should result in positive impacts to this community on BLM-administered lands. However, because this community occurs along streams throughout the south coast mountain ranges (Holland 1986), as well as within several national forests where it would likely be protected in the future, no significant cumulative impacts are expected regionally.

**Southern Willow Scrub.** From a total of 9.2 miles of riparian habitat where this community is the dominant vegetation type, approximately 5.3 miles (58%) would be sold or exchanged. A total of 0.8 miles (8%) would be available for some protective transfer, and approximately 3 miles (34%) would be retained. Land acquisitions in the Riverside-San Bernardino and San Diego County Management Areas are expected to contribute to the conservation of larger, more manageable segments of this community on public lands. This alternative would, therefore, have positive impacts on this community, and no negative cumulative impacts.

**Other Riparian Communities.** From an estimated 30.2 miles of unclassified riparian forests and 52.7 miles of unclassified riparian community located on BLM-administered land in the South Coast Planning Area, 3.2 miles (10%) and 5.5 miles (10%) respectively, would be subject to land disposal. A total of 2.3 miles (8%) of unclassified riparian forest and 4 miles (8%) of the unclassified riparian community would be available for some protective transfer, where disposal would be conditioned on protection of the habitat or minimal development is expected. A total of 67.9 miles of these communities would be retained. This loss of riparian forest may include a additional losses of South Coast Live Oak Riparian Forest community.

**Conclusion:** This alternative would have overall positive impacts on South Coast Live Oak Riparian Forest, Southern Sycamore-Alder Riparian Woodland, Southern Willow Scrub and Southern Interior

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Cypress Forest. It would, however, have a negative cumulative impact on Southern Cottonwood-Willow Riparian Forest.

### Impacts to Open Space Values

The primary impact to open space values would result from the disposal and subsequent development of lands. Under this alternative, it is expected that approximately 15,555 acres of public land of which 43% is rated as either high or medium in open space values, would be disposed of and eventually developed. This impact would be compounded by the projected growth and development on private lands with the additional loss of open space.

For the most part, open space values would be expected to be maintained on 112,907 acres of BLM-administered land, of which 87% is rated as high or medium for open space values. These lands would either be retained under BLM management, maintained under R&PP lease, disposed of with protective conditions, or identified for transfer to the U.S. Forest Service. In addition, land ownership adjustments would add over 23,000 acres to public land ownership under this alternative. Open space values on these lands may be affected by actions such as prescribed burning or mineral exploration/development. The impacts of prescribed burning would, however, be minimal and of short duration. The overall impacts from the expected levels of mineral activity would also be negative but not significant.

Conclusion: Overall, open space values would be maintained on 112,907 acres of public land. Of this total, 98,229 acres are rated as having high or moderate open space value. Conservation of open space would also be enhanced by land acquisitions and consolidation. In some areas, however, open space values would be negatively impacted by the loss of 15,555 acres of public land through disposal and subsequent development, including 6,689 acres rated as high or moderate in open space value.

### Impacts to Recreation Use

This alternative will result in the provision of many new recreational opportunities and facilities, and the disposal of relatively few lands with recreational potential. Three Special Recreation Management Areas (SRMAs) will be identified to focus development and use of areas offering exceptional recreational opportunities. These areas are Beauty Mountain, Poppet Flat, and Border Mountains, and they will experience the highest levels of development and use within the planning area. Impacts from development and use are expected to occur, and will be mitigated through careful facility design, construction, and management.

Recreational easements for non-motorized as well as motorized access will be acquired. All of these acquisitions and access improvements will provide new recreational opportunities, as well as improve the quality of the recreational experience. These developments will also greatly enhance the use of facilities to be constructed under this alternative.

A number of developed facilities will be constructed under this alternative. Four campgrounds will be developed, one each at Otay Mountain, and Hauser Mountain, and two at Beauty Mountain. Two of these campgrounds will be limited to use by nonmotorized recreationists. Three administrative sites will be developed for visitor contact and resource management at Otay Mountain, Poppet Flat, and Beauty Mountain. Five interpretive displays will be constructed for user information and guidance at Otay Mountain, Tecate (Kuchamaa), Hauser Mountain, Beauty Mountain and Poppet Flat.

The OHV designations will provide opportunities for motorized forms of recreation while generally limiting use to existing routes of travel, as long as the lands remain under federal management. Following land tenure adjustment actions and acquisition of access, the available mileage of motorized

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vehicle recreational routes will decrease slightly, from the existing 260 to 253 miles. Motorized vehicle closures will be made on parcels in the following locations: Fern Creek, Cedar Canyon ACEC, Santa Ana River wash, Oak Mountain, Valle Vista, Agua Tibia WSA and two parcels within the Santa Margarita River ACEC. OHV use in the Tecate (Kuchamaa) ACEC will be restricted to a single existing route of travel and the Canyon Lake parcel will provide two miles of route.

Development and operation of these facilities, as well as the construction of roads and trails, will cause both long-term and short-term impacts, mostly of a site-specific nature. These impacts will be addressed in detail during project planning for each specific action.

The provision of a moderate level of visitor services will be a great benefit to recreationists. Users will have information available about recreational opportunities, resource values, and safety. Maps, guides, signs, maps, and regular management presence and contacts will greatly improve the quantity and quality of the recreational experience.

Vegetative manipulations will marginally increase recreational opportunities for deer and quail hunting and nature study, and will cause short-term visual impacts following burns.

Recreation use is expected to increase dramatically following the acquisition of access, development of facilities, and the provision of visitor services. Loss of recreational opportunities on disposed parcels is expected to be minimal due to the insignificant levels of use and opportunities they contain. Ongoing urban expansion and local population growth will also contribute to an increase in use from the existing 37,000 to 161,000 VUD by the year 2000. The retained parcels will generally show significantly higher levels of use, and conflicts between non-compatible recreation uses are expected to increase somewhat. However, the separation of motorized and nonmotorized users on well defined trail systems will serve to reduce the frequency of potential conflicts. The amount of use projected under this alternative is considered to be a meaningful contribution to the overall supply of outdoor recreational opportunities in the South Coast Planning Area.

Current and potential users of the disposed lands will not have the opportunity to recreate on the disposed parcels, and displacement to other areas offering similar types of opportunities is expected, which may increase recreational use and/or conflicts on those parcels.

Conclusion: Substantial benefits to the recreating public through the increased development of recreational opportunities and services would be provided by this alternative. The loss of land base from disposal actions is small, and involves lands generally offering little recreational potential. Increases in public use from 37,000 to 161,000 VUD are attributable to urban expansion, local population growth, acquisition of access, development of facilities, and the provision of visitor services. The cumulative impact of this alternative to meeting recreational supply and demand in the South Coast Planning Area is positive and significant.

### **Impacts to Mineral Development**

Impacts to mineral development could result from restrictions placed on development activities (such as oil and gas lease stipulations) and from the disposal of lands with mineral potential, since their subsequent land-use development could interfere with development of mineral resources.

The Steele Peak Area of Critical Environmental Concern (ACEC) as well as the Santa Margarita Reserve ACEC (a total of 2,800 acres) would be withdrawn from mineral development. In addition five other ACECs with a total of 9,419 acres would be closed to material sales.

Oil and gas leasing stipulations under this alternative could increase development costs for new leases in some instances. Development of known reserves would not be precluded, although drilling

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of exploratory wells may be hampered due to application of No Surface Occupancy Stipulations.

The disposal of surface lands under this alternative would affect acreage of moderate and high potential mineral resources administered by BLM as shown in Table 4-4.

Impacts from land tenure adjustments will vary depending on the mineral potential of lands acquired and the conditions of individual land tenure adjustment actions (i.e. recovery of fair market value, reservation, or exchange of mineral rights). Lands acquired for threatened or endangered species habitat will not likely be available for discretionary mineral actions. The mining of locatable minerals under 43 CFR 3809 would be restricted to protect sensitive species.

Conclusion: Withdrawals, closure of lands to mineral material sales, and land disposal actions would result in a significant portion of BLM public surface lands with mineral potential being unavailable for mineral development. Oil and gas leasing stipulations would increase development costs for new leases and complicate exploratory efforts. The overall impact would negative and significant.

**Table 4-4. Mineral Potential of Surface Lands Available for Disposal**

Resource	Total Acres on BLM Surface	Acres Disposed	Percentage Reduction
Gold	24,490	12,957	52.9%
Gemstone and Dimension stone	11,931	7,785	65.3%
Metallic and non-metallic	30,982	27,137	87.6%
High Potential Sand and Gravel	8,852	2,682	30.3%
Moderate Potential Sand and Gravel	71,183	47,656	66.9%

### Impacts to Paleontologic Resources

The acquisition of an additional 1,000 acres in the Badlands area of Riverside County will supplement public ownership of a significant paleontological resource.

Negative impacts to paleontological resources in Los Angeles County would primarily result from disposal of lands to the private sector and the subsequent development of these lands. At projected growth rates, Los Angeles County is expected to allow more concentrated housing in outlying areas. In Los Angeles County some of the disposal parcels have a high potential for significant fossil bearing deposits. Reasonably foreseeable development for these lands would be for low density residential use (i.e. one residential unit per 40 acres). As a result, the potential impacts to fossil-bearing deposits would occur from grading of house sites, associated landscaped areas, and access roads. Subsequent to disposal, the responsibility for enforcing the California Environmental Quality Act in terms of mitigation of this non-renewable resource will lie with the respective counties. In Los Angeles County, it is estimated that disposal and subsequent light grading of these lands would potentially have a low to moderate negative impact on paleontological resources.

Sand and gravel quarry activities are expected to occur on 200 to 600 acres of split-estate lands in the Agua Dulce area of Los Angeles County. This could have a negative impact on paleontological resources. Testing and evaluation of the sites prior to mining, with appropriate mitigation measures taken, would alleviate any negative impacts.

In the next ten years, oil and gas development on BLM lands in Los Angeles County is expected to cause an additional 100 acres of surface disturbance. Negative impacts to paleontological resources from this activity would be minimal to moderate, since grading for the drill pads, and access roads is normally not extensive.

OHV use would impact paleontologic resources in the Badlands area and the Poppet Flat area of Riverside County as well as those resources in Los Angeles County. These impacts could result from direct crushing of fossil deposits and accelerated soil erosion which could expose fossils to accidental damage. Restriction of OHV use to existing routes of travel in these areas, however, will keep impacts from OHV use to a minimum. As residential development increases in the adjacent Moreno Valley, Beaumont, and other surrounding communities, there will be increased pressure on the Badlands for OHV and other recreational uses.

Conclusion: In Riverside County, the acquisition of an additional 1,000 acres in the Badlands will supplement public ownership of a significant paleontological resource. Negative impacts from OHV use will increase as population and concurrent demand for recreation use grows. Restriction and enforcement of OHV use to existing routes of travel, however, would minimize these impacts. Low to moderate negative impacts to fossil-bearing deposits will result in Los Angeles County as a consequence of land disposal, transfer, mining, or recreational activities.

### **Impacts to Kuchamaa (Native American Religious Values)**

Under this alternative, Kuchamaa and Little Tecate Peak would be retained in federal ownership and protected by the management prescriptions either specified in this RMP or developed in a site-specific ACEC plan. The ACEC would be a right-of-way avoidance area and lands within the ACEC would be acquired for the protection and enhancement of the viewshed. As a consequence, positive impacts would include Native American access to these mountains for religious purposes and reversal of the trend of impacts to the natural state of Kuchamaa caused by the presence of a communication site on Kuchamaa and residential development in the viewshed.

The vegetation management actions (prescribed burning) anticipated to occur under this alternative are not expected to negatively affect Kuchamaa. Management prescriptions developed for the proposed ACEC would minimize impacts from recreation use.

Conclusion: The management prescriptions developed for this proposed ACEC would protect the Native American religious values and the natural state of Little Tecate Peak and Kuchamaa, and result in a significant positive impact.

### **Impacts to Watershed (Beauty Mountain Management Area)**

The designation, within the eastern part of the Beauty Mountain WSA, of a 5,800-acre Critical Soil and Watershed ACEC would provide for special management of the sensitive soil and water resources there, and would have a positive impact on these resources. However, approximately 150 acres (3%) of the sensitive watershed area would be degraded by tungsten mining and related activities.



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Conclusion: Soil erosion, stream bank deterioration, and downstream siltation would increase and affect the lower reaches of the watershed west and south of the Pawnee Mine site. The management of the ACEC would maximize soil erosion control and rehabilitation measures to mitigate impacts. Depending on the magnitude of these mining activities, however, their impact on soil and watershed resources may represent a significant negative cumulative impact, since many watershed areas within the South Coast Planning Area have been, or are likely to be, affected by private land development.

## Alternative 4 - Use Opportunities

### Reasonably Foreseeable Development

#### Lands Actions

Regional land use and growth projections are the same as described for Alternative 1.

A total of 26,105 acres would be available for disposal through exchange or sale. For 81% (14,956 acres) of these lands reasonably foreseeable development following transfer from federal ownership would be predominantly residential use, in accordance with local government land use plans, with a density of one dwelling unit or more per forty acres. For 19% (4,856 acres) of the lands, however, either disposal is conditioned on protecting sensitive resources or extensive development is not expected even if the lands are transferred from federal ownership. The expectations for these are described below:

1. A total of 22 parcels (3,180 acres), are available for exchange only for the purpose of acquiring 3,820 acres of public land within the Steele Peak SKR Study Reserve Area. These 22 parcels include 11 parcels (1,222 acres) within other Stephens' kangaroo rat reserve study areas and 11 parcels (1,958 acres) with documented SKR presence. These exchanges would consolidate public ownership surrounding four existing parcels (1,540 acres) of BLM public land within the Steele Peak Reserve Area. Some of the other SKR Reserve Study Areas which contain 11 parcels (1,222 acres) of BLM public land may possibly be selected as SKR Reserve Areas. BLM parcels within these selected SKR Reserves are expected to be exchanged to the Riverside County Habitat Management Agency for the BLM public land acquisitions at Steele Peak.
2. One 200-acre parcel, with a recent record of the federally endangered Least Bell's Vireo, is identified for disposal only if the habitat would be protected.
3. One 50-acre parcel, identified as having potential for occurrence of the federally endangered slender-horned spineflower, is available for disposal only if surveys reveal that slender-horned spineflower plants are not present.
4. There are six parcels containing 740 acres in San Diego County which are currently leased by local government agencies under the Recreation and Public Purpose (R&PP) Act, or are covered by existing lease applications. It is expected that these lands will be used in accordance with development plans which primarily call for the construction of recreation staging areas and trails for non-motorized use.
5. Five of the parcels near Castaic Lake in Los Angeles County, with a total of 686 acres, are expected to be transferred to the California State Department of Water Resources under the R&PP Act. Development of these parcels will be limited to the provision of facilities for recreational use.

In addition to the lands identified above, a total of 15,037 acres are identified for consolidation exchange in the Beauty Mountain Management Area and the Border Mountains area of San Diego County. It is expected that a portion of these lands will be exchanged to acquire nearby lands which possess similar acreage with comparable or more important resource values.

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Land acquisitions identified for this alternative are as follows:

Otay Mountain inholdings - 500 acres	Santa Margarita ACEC - 300 acres
Hauser Mountain inholdings - 800 acres	Oak Mountain vicinity - 640 acres
Cedar Canyon ACEC - 280 acres	Badlands vicinity - 1,000 acres
Kuchamaa ACEC - 110 acres	Beauty Mountain area consolidation - up to 9,141 acres
Steele Peak ACEC - 3,820 acres	Agua Dulce vicinity - 1,000 acres

### **Recreation Actions**

Four Special Recreation Management Areas (SRMAs) will be identified at Beauty Mountain, Border Mountains, Poppet Flat and Canyon Lake.

The OHV designation will be limited to existing routes of travel except in the following areas:

- Kuchamaa ACEC - limited to a single existing route;
- Cedar Canyon ACEC - closed;
- Fern Creek - closed;
- Canyon Lake - approximately two miles of existing route are open, and the remaining area closed;
- Agua Tibia - closed;
- Santa Ana River wash parcels - closed;
- Oak Mountain - closed;
- Valle Vista - closed;

Following land ownership adjustments, easement acquisition and new construction, it is expected that the total length of routes available for use will increase slightly from 260 to 264 miles.

A number of developed facilities will be constructed under this alternative. Included will be six campgrounds, including one each at Otay Mountain, Hauser Mountain, Mc Almond Mountain, and three at Beauty Mountain. Two of these campgrounds will be limited to nonmotorized access.

Three administrative sites will be developed, with one each at Otay Mountain, Poppet Flat, and Beauty Mountain.

Six interpretive displays will be developed, with one each at Otay Mountain, Tecate (Kuchamaa), Hauser Mountain, Poppet Flat, and two at Beauty Mountain.

A moderately high level of visitor services will be provided, including the developed facilities, signs, maps, guides, other information materials, and regular management presence and contacts.

Recreation use levels will increase from the existing 37,000 to 233,000 VUD by the year 2000. Losses from the limited disposal of lands will be more than offset by increased use resulting from the development of facilities, provision of access, new visitor services, and urban expansion and population growth.

## Mineral Development

**Sand and Gravel Development.** Development activity is expected to be similar to that described for Alternative 1. The acquisition of surface ownership in the Agua Dulce area of Los Angeles county will probably result in one additional operation, with additional surface disturbance of 100 to 200 acres over the next 20 years.

The ACECs to be designated under this alternative (a total of 4,620) acres) would be closed to mineral material sales. This is because most of the ACECs at best have moderate potential for occurrence of sand and gravel resources. The Santa Ana River Wash ACEC (760 acres) has known sand and gravel resources, but is considered unavailable for material sales even without ACEC designation due to the presence of two federally endangered plant species.

**Oil and Gas Development.** Reasonably foreseeable development of oil and gas is expected to be the same as that described for Alternative 1.

**Locatable Mineral Development.** Development of locatable mineral resources is expected to be the same as described for Alternative 1.

## Vegetation Management Actions

Management actions for Alternative 4 would be the same as described in Alternative 1.

## Environmental Consequences

### Impacts to Wildlife

#### Federally Listed or Proposed Species

**Unarmored Three-spined Stickleback.** Refer to Alternative 1 for a discussion of the current status of this fish species.

This endangered fish does not occur on lands administered by the BLM. Its range within the Santa Clara River is, however, adjacent to several small BLM-administered parcels and is downstream of 2,819 acres of BLM surface land and 21,806 acres of subsurface mineral split-estate with high to medium potential for aggregate material extraction and/or oil and gas development. The reasonably foreseeable development of these resources over the next 20 years is expected to result in the disturbance of up to 600 acres for sand and gravel extraction and the development of 100 oil and gas wells. This puts the species in a position of potentially being affected by secondary impacts related to oil spills and sand and gravel extraction, including increased sediment loads.

Conclusion: Under this alternative there would be a negative, but not significant, cumulative impact to unarmored three-spine stickleback. State requirements, BLM standard stipulations and a controlled surface occupancy stipulation on upstream areas would control the indirect impacts to unarmored three-spined stickleback in the typical mineral development scenario.

**California Condor.** Refer to Alternative 1 for a discussion of the current status of this bird.

In this alternative, the sale or exchange of 3,596 acres of BLM-administered land would result in the loss of 442 acres of the 780 acres of condor core range administered by BLM. An additional 3,073

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acres within the area identified as the limit of the condors' main range would be lost and would be impacted by expected low-density development (one dwelling unit per 40 acres).

The development of sand and gravel resources on federal mineral split-estate in the management area is expected to impact up to 600 acres of potential habitat (habitat outside of the core area) of the California Condor. At present, 18% of the identified condor habitat within the planning area has been classified as having a moderate to high potential for oil and gas development. Oil and gas development on public lands is expected to create 100 acres of new surface disturbance in association with well drilling and ancillary facilities. Approximately 50% of the drilling activity would occur in existing oil fields in the area delineated as condor core habitat.

Conclusion: Impacts to condors from the land tenure adjustments proposed in this alternative are expected to be negative but not significant due to: (a) the small size of the parcels identified for disposal; (b) the extremely small acreage involved relative to the condor's identified core and home range area; and (c) the limited opportunity for residential development on most of the parcels due to topography. Of the over 900,000 acres of identified California Condor habitat within the management area, up to 700 acres on the subsurface federal mineral estate would be impacted through the development of mineral resources. Of this 700 acres only 50 acres would occur within the area identified as core habitat, and this would be within an already existing oil field. Consequently, cumulative impacts to California Condors would be negative but not significant.

**Stephens' Kangaroo Rat.** Refer to Alternative 1 for a discussion of the current status of this fish species.

In this alternative, twenty-two parcels, including 11 parcels (1,222 acres) within other reserve study areas and 11 parcels (1,958 acres) containing 296 acres of occupied habitat (Montgomery 1989, RECON 1990), would be available for exchange for the sole purpose of acquiring 3,820 acres within the proposed Steele Peak Reserve. These exchanges would consolidate public ownership around four existing parcels (1,540 acres) of BLM public land within the Steele Peak reserve study area.

The 11 BLM parcels within other reserve study areas, would be exchanged to other government agencies or groups acting on behalf of the reserve system to ensure the protection of SKR habitat. These parcels, totaling 1,222 acres, include 343 acres of occupied habitat and an additional 7 acres are identified as potential SKR habitat. Even if retained by the BLM, it is expected that the 11 parcels outside of reserve study areas would be surrounded by development within the next 15 years. The long-term viability of these isolated populations is doubtful. SKR habitat on these parcels would become further fragmented, with associated SKR populations becoming increasingly isolated and possibly extirpated within the next 20 years.

OHV use of existing routes on lands retained by the BLM will increase with encroaching development and population growth. This increased use, coupled with the inability of law enforcement to provide continual patrol of a given area, would result in additional unplanned routes of travel and an increase in cross-county use. Impacts to Stephens' kangaroo rat (SKR) would occur through direct mortality of individuals from burrow collapse and indirect impacts from habitat degradation. Based on the analysis of 760 acres of occupied habitat located outside of SKR reserve study areas (identified in the Habitat Conservation Plan), less than six acres of new disturbance is expected over 20 years, resulting in the death of less than 12 animals (Hicks and Cooperrider 1977, Montgomery 1989, and O'Farrell and Uptain 1989, RECON 1990). Conversely, this level of OHV activity is expected to enhance opportunities for SKR movement/pioneering activity by increasing the number of dirt roads linking SKR habitats to pockets of potential habitat.

Conclusion: The BLM would pursue the acquisition of 3,820 acres lands within the Steele Peak Reserve (40 percent of the acquisition needs projected for Steele Peak Reserve). It is expected that

BLM lands in other reserve study areas would be acquired for inclusion in the reserve system. The 3,517 acres of occupied and potential habitat on BLM parcels outside of reserve study areas would be sold or exchanged. These parcels, however, would be exchanged for land within the Steele Peak Reserve. Habitat values on acquired lands are expected to be similar, and no net loss of Stephens' kangaroo rat habitat under BLM administration is expected. The anticipated increase of OHV use on parcels remaining in public ownership would have some minor negative short-term impacts on SKR through direct mortality, but the long-term impacts would not be significant. Cumulative impacts to Stephens' kangaroo rat would be slightly positive under this alternative.

**Least Bell's Vireo.** Refer to Alternative 1 for a discussion of the current status of this bird.

Least Bell's Vireos have been recorded on only one parcel administered by the BLM within the planning area. Several pairs were observed in April of 1988 on this parcel, in the Warm Springs drainage, a tributary of Murrieta Creek (G. Bell, pers. comm.). This parcel is isolated by development from the closest major subpopulation in the Santa Margarita River and is slated for protective disposal in this alternative.

Eighteen other BLM parcels contain 12.9 miles of riparian systems with well-developed understories (shrub willows were used as an indicator species) and are considered to be potential habitat. In this alternative, one of these parcels containing 0.7 miles of potential habitat around Canyon Lake would be exchanged to consolidate land within the Steele Peak Reserve. Five parcels with 1.2 miles of well-developed riparian segments would be sold or exchanged, including 0.3 miles in Rainbow Creek within the Santa Margarita drainage and a 0.6 mile segment located three miles north of the Santa Margarita River. One parcel containing 0.3 miles of potential habitat would be available for R&PP lease. A total of 10.7 miles of potential habitat would be retained in this alternative, including one segment adjacent to Santa Ysabel Creek, another segment containing 1.5 miles of potential habitat along the Santa Margarita River and 0.9 miles of potential habitat in Fern Creek, another tributary of the Santa Margarita River.

Some acquisition of potential habitat for Least Bell's Vireo in this alternative would occur. Approximately three miles of moderate quality potential habitat for Least Bell's Vireo would be acquired within the proposed Steele Peak Reserve, and an undetermined amount of high quality nesting habitat would be acquired along the Santa Margarita River.

**Conclusion:** A total of 1.9 miles, some of it high quality potential habitat, would be sold and could be impacted by development. This loss from federal ownership would be somewhat offset by the acquisition of three miles of moderate quality habitat within the Steele Peak Reserve and an undetermined amount of high quality habitat along the Santa Margarita River. Some benefits would be derived from the consolidation of riparian habitat, increasing the manageability of these areas. Cumulative impacts to Least Bell's Vireo under this alternative would not be significant.

### **Candidate Species**

**Wright's Checkerspot Butterfly.** The only known population of this butterfly occurs in the vicinity of Oak Mountain (Ballmer, pers. comm.). This species of butterfly is reported to be associated with both clay soils and a host plant, Dot-seed plantain *Plantago erecta*.

The retention of existing BLM lands and the acquisition of 640 acres in the Oak Mountain area would protect both the larval food source and the habitat that the larval form of this species uses to avoid desiccation during drought periods. This would significantly enhance the survival opportunities for this butterfly by protecting habitat used for foraging and climatal protection during drought for the only known extant population.

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Conclusion: The acquisition of land in the Oak Mountain area under this alternative would have a highly positive, significant cumulative impact to Wright's Checkerspot Butterfly.

**California Gnatcatcher.** Refer to Alternative 1 for discussion of the current status of this bird.

Based on key habitat components (coastal sage scrub with California sagebrush and California buckwheat), it is concluded that 36 public parcels within the planning area contain 5,084 acres of suitable habitat for this bird. California Gnatcatcher has been recorded recently on eight of these parcels. Eight parcels containing 1,034 acres of suitable habitat (two of which have records of California Gnatcatcher) would be sold or exchanged. Fifteen parcels, containing 1,504 acres of suitable habitat would be available for exchange to acquire land within the Steele Peak Reserve and one 40-acre parcel with potential habitat would be exchanged to acquire land in the border region of the planning area. In this alternative, a total of 2,506 acres of suitable habitat would be retained. Overall, this alternative would result in the loss of 2,578 acres of suitable Gnatcatcher habitat from federal ownership. This is offset by the acquisition of approximately 5,900 acres of land, much of it coastal sage scrub, in the vicinity of Steele Peak Reserve, the Badlands, Otay Mountain, Cedar Canyon and the Santa Margarita River. At least some of the coastal sage scrub habitat acquired in these areas is likely to be suitable, if not occupied, California Gnatcatcher habitat. Of the eight parcels with recent California Gnatcatcher records three parcels, containing 416 acres of potential habitat, would be retained. Four of the five parcels that are being sold or exchanged are relatively small, containing 40-acres or less. One larger 297-acre parcel would also be sold.

Impacts from mineral resources development is expected on up to 32 acres contained within seven parcels. In addition, the areas surrounding these mining sites would be degraded by noise, traffic, etc., so that the effective loss to California Gnatcatcher is estimated at about 26 acres per developed well or 150 acres total development.

Conclusion: Overall, impacts to California Gnatcatcher from lands actions in this alternative would be positive. Of the 5,084 acres of suitable habitat within the planning area, 20% would be sold or exchanged, 30% would be exchanged for land within the Steele Peak Reserve, 49% would be retained and less than 1% would be available for consolidation exchange. Of the eight parcels with a recent record of California Gnatcatcher, three would be retained. Four of the five parcels being sold or exchanged are 40 acres or less in size. These losses of California Gnatcatcher habitat from federal ownership are offset by the acquisition of up to 3,820 acres within the Steele Peak Reserve. Coastal sage scrub is a dominant habitat type within the reserve and it is expected that at least some of this coastal sage scrub habitat would be potential, if not occupied habitat for California Gnatcatcher. Consolidation within the reserve would probably not result in a net loss of this key habitat type under BLM administration. The acquisition of 2,080 acres, much of it coastal sage scrub habitat, in the vicinity of the Santa Margarita River, the Badlands, Cedar Canyon, and O'Neal Canyon would have additional benefits on California Gnatcatcher populations. Impacts to California Gnatcatcher from mining would be negligible because of the limited acreage involved. Cumulative impacts to California Gnatcatcher in this alternative would be moderately positive but not significant.

**Orange-throated Whiptail.** Refer to Alternative 1 for a discussion of the current status of this lizard.

Orange-throated whiptails have been recorded recently on nine BLM parcels containing 4,316 acres within the planning area. These nine parcels are widely dispersed throughout southwestern Riverside County and eastern San Diego County. In this alternative, five of these parcels (894 acres) would be sold or exchanged, three parcels (590 acres) would be exchanged to consolidate land within the Steele Peak Reserve, and one parcel (2,832 acres) would be retained. One of the parcels (80 acres) with probable occurrence for this species would be retained under BLM administration and three parcels (1,518 acres) would be exchanged for BLM acquisitions elsewhere. Land acquisitions under this alternative, particularly of coastal sage scrub habitat at Steele Peak, the Santa Margarita River,

the Badlands, Cedar Canyon, and O'Neal Canyon, would benefit orange-throated whiptail.

Impacts to this lizard from mineral resources development are expected to occur on up to 32 acres included within seven parcels; these impacts are not considered to be significant.

Conclusion: The sale or exchange of known habitat for orange-throated whiptail on BLM-administered land would be somewhat offset by the acquisition and consolidation of coastal sage scrub habitat, particularly within the Steele Peak Reserve; no significant negative cumulative impact is expected.

**Southwestern Pond Turtle.** Brattstrom and Messer (1988), in their report to the California Department of Fish and Game, stated that this turtle is currently found in only a few widely separated localities. The authors suggest several locations as possible areas for southwestern pond turtle management/mitigation-compensation. None of the recommended management areas contain BLM lands. They also document a small population in Lake Wohlford; this would marginally include the adjacent parcels administered by BLM: 247-331 and 247-332, both of which would be retained in this alternative. Neither of these parcels are known to actually support pond turtles. In addition, the BLM administers 1.5 miles along the Santa Margarita River. This river is known to support southwestern pond turtles downstream, where they are associated with beaver ponds near Fallbrook. Beaver ponds also exist on the BLM-administered segments of the river and could support southwestern pond turtles. These parcels would be retained under this alternative and the planned acquisition of 300 acres along the Santa Margarita River would ensure the long-term viability of this habitat.

Conclusions: The acquisition of land along the Santa Margarita River would improve the long-term viability of this habitat and have a positive cumulative impact on southwestern pond turtle; however, this impact is not expected to be regionally significant.

### **Game Species**

Habitat for mule deer would be impacted through the disposal and eventual development of 2,836 acres of potential deer habitat (parcels greater than 600 acres) administered by BLM. Furthermore, it is expected that up to 25% (8,948 acres) of the 35,791 acres of potential quail habitat available for disposal would be impacted by eventual development.

In addition to the losses of game habitat resulting from land tenure adjustments, some habitat is also expected to be impacted by OHV use. An increase in OHV use is anticipated on existing routes due to encroaching development and population growth. This increased use, coupled with the inability of law enforcement to provide continual patrol in a given area, would result in an increase in cross-county use. This type of recreation use, coupled with the expected increase in visitor use days as a result of campground development, establishment of new trails, and easement acquisition, would create a disruptive and detrimental impact to resident large animal populations. It is estimated that less than two percent of existing deer range in the planning area would be impacted directly or indirectly by this activity.

Losses to game habitat would also occur as a result of mining activity. It is expected that up to 200 acres of game habitat would be lost from strip mining for tungsten or other mineral deposits in the southeastern portion of the Beauty Mountain Management Area. In addition, the areas surrounding these mining sites would be degraded by noise and traffic, disrupting of movement patterns and creating an effective loss of 2,000 acres of mule deer habitat.

These impacts from land disposal, recreation use, and mineral development would be offset by the expected acquisition of 21,501 acres to consolidate public lands. This consolidation would help facilitate prescribed burns to achieve an increase of 3,200 acres of quality early seral vegetation over a 12,800 acre area during any 10-year period.



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**Conclusion:** The loss of BLM-administered deer habitat through all actions considered in this alternative would be 6,718 acres. Offsetting these impacts is the expected acquisition of 21,501 acres to consolidate public lands. Consolidation would help facilitate vegetation management, primarily prescribed burns, increasing high quality forage for wildlife. In concert, this would equate to a net gain of 27,583 acres or a 29% increase over the existing acreage of deer habitat on BLM-administered lands. A net gain of 14,783 acres of quail habitat is possible under this alternative. These habitat gains are expected to have a highly positive impact to mule deer populations and quail populations relative to the extent of habitat used by these species on BLM lands in the planning area. From a regional perspective, however, cumulative impacts are expected to be of low to moderate importance.

#### **Important Wildlife Habitat Types**

For a general discussion of important wildlife habitat types refer to Alternative 1.

**Coastal Sage Scrub.** In this alternative, 4,614 acres (43%) of the total of 10,817 acres of manageable coastal sage scrub (coastal sage scrub in blocks of 30 acres or more) would be sold or exchanged in the planning area and could be eventually developed. This would be somewhat offset by the acquisition of approximately 3,820 acres of primarily coastal sage scrub in the Steele Peak Reserve. An additional 1,465 (13%) acres of manageable coastal sage scrub would be available for protective disposal or R&PP lease. The remaining 4,738 acres (44%) of manageable coastal sage scrub within the planning area would be retained in this alternative.

**Riparian Habitat.** In this alternative, 25.5 miles of riparian habitat (20% of the total 130 miles of riparian habitat within the planning area) would be sold or exchanged and could eventually be developed. Of the riparian area lost from federal ownership, 16.6 miles is considered as manageable riparian habitat (riparian segments at least 0.5 miles in length). Approximately 13 miles (10%) of the total riparian habitat (includes 8.6 miles of manageable riparian habitat) would be available for some protective transfer. This includes three miles of riparian habitat that would be included in areas leased under the R&PP Act. Disposal of these lands would be conditioned either on the protection of the habitat or on minimal development. The remaining 92 miles (70%) of the total riparian habitat would be retained. Of the riparian habitat being retained, 85.8 miles are considered manageable.

In addition to impacts associated with land tenure adjustments, negative impacts to riparian and coastal sage scrub communities would result from OHV use. These expected impacts would result from physical damage to plants within these communities and from accelerated soil erosion due to increased OHV use. Increases in OHV use are expected to accompany encroaching development and population growth, resulting in additional unplanned routes of travel and an increase in cross-county use.

**Conclusion:** Forty-three percent of the manageable coastal sage scrub administered by BLM would be sold or exchanged; 13% would be available for protective disposal or R&PP lease; and 44% would be retained under BLM management. As a result of land acquisitions, the amount of coastal sage scrub under BLM administration is expected to increase by up to 800 acres. Fifteen percent of the manageable riparian habitat in the planning area would be sold or exchanged; 8% would be available for protective disposal or R&PP lease; and 77% would be retained by the BLM. Acquisitions of riparian areas within the Steele Peak Reserve and along the Santa Margarita River would partially offset the loss of riparian habitat in other areas from federal ownership. On a region-wide basis, however, the cumulative impacts to either coastal sage scrub or riparian areas would not be significant.

## Impacts to Vegetation

### Federally Listed Species

**Santa Ana River woolly-star** (*Eriastrum densifolium ssp. sanctorum*). The impacts of this alternative would be the same as those described for Alternative 3.

**Slender-horned spineflower** (*Dodecahema leptoceras*). The impacts of this alternative would be the same as those described for Alternative 3.

### State-Listed Species

**California orcutt grass** (*Orcuttia californica*). The impacts of this alternative would be the same as those described for Alternative 1.

**Mexican flannel bush** (*Fremontodendron mexicanum*). The impacts of this alternative would be the same as those described for Alternative 3.

**Munz's onion** (*Allium fimbriatum var. munzii*). The impacts of this alternative would be the same as those described for Alternative 1.

**Slender-pod jewelflower** (*Caulanthus stenocarpus*). The impacts of this alternative would be the same as those described for Alternative 3.

### BLM-Sensitive Species

**Johnston's rock cress** (*Arabis johnstonii*). The impacts of this alternative would be the same as those described for Alternative 1.

**Many-stemmed dudleya** (*Dudleya multicaulis*). The impacts of this alternative would be the same as those described for Alternative 1.

**Payson's jewelflower** (*Caulanthus simulans*). The impacts of this alternative would be the same as those described for Alternative 3. However, less than 1% of the potential habitat on BLM-administered lands would be disturbed by mineral explorations in the Steele Peak area. There would be no cumulative impact since, overall, populations and potential habitats for this species would be enhanced on BLM lands.

**San Diego rattleweed** (*Astragalus oocarpus*). The impacts of this alternative would be the same as those described for Alternative 2.

**San Felipe monardella** (*Monardella nana ssp. leptosiphon*). The impacts of this alternative would be the same as those described for Alternative 2. In addition, potential habitat would be degraded by approximately 5% or more by an increase in wildfire frequency associated with a substantial increase in visitor use and recreational activities. Provided that fire prevention and control measures are commensurate with that increase in recreational use this impact could be reduced to less than 5%, and there would be no significant cumulative impact.

**San Fernando Valley spineflower** (*Chorizanthe parryi var. fernandina*). The impacts of this alternative would be the same as those described for Alternative 1.

**Tecate cypress** (*Cupressus forbesii*). The impacts of this alternative would be the same as those described for Alternative 3, except that prescribed burns on the Otay allotment would not be reduced

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from the levels prescribed in the Otay EIS. Immature stands of cypress, located east of the Minnewawa Truck Trail and north of the Otay Mountain Truck Trail, would be impacted and their regeneration jeopardized, by prescribed burns on the Otay grazing allotment. These prescribed burns would have significant negative impacts on the immature stands located in the southeastern part of the allotment. Cumulative impacts would be significant.

Conclusion: This alternative would enhance the conservation of two federally listed species in the Santa Ana River wash area: the Santa Ana River woolly-star and the slender-horned spineflower. It would also benefit one state-listed species, Mexican flannel bush. It would, however have significant negative impact on the potential habitats for one state-listed species and one BLM-sensitive species: Munz's onion and many-stemmed dudleya, respectively. In each case, the cumulative impacts would be significant because most other potential habitat would likely be impacted by continuing development of private lands in the South Coast Planning Area. It would have significant negative impacts, and negative cumulative impacts on populations of Tecate cypress (BLM-sensitive) because of the high probability for escape of prescribed burning conducted for livestock grazing objectives in the eastern part of the Otay allotment. This alternative may also impact potential habitat for the San Fernando Valley spineflower (BLM-sensitive) in the Hasley Canyon area in Los Angeles County.

#### **Sensitive Plant Communities**

**Freshwater Seep.** From an estimated 1.5 acres on BLM lands, all would be transferred from federal ownership through conditional exchange. The probability of this community being acquired in the exchange process is low. These areas could be negatively impacted by eventual development. The cumulative impact on this community, however, would not be significant regionally.

**Engelmann Oak Woodland.** All of an estimated 45 acres of this community on BLM-administered land would be lost through land disposal in the San Diego County Management Area. Because most of this community type is located within the Cleveland National Forest, and is likely to be protected in the future, this loss would not represent a significant cumulative impact.

**Riversidean and Diegan Sage Scrub.** See the Wildlife section (refer to impacts on coastal sage scrub under Important Wildlife Habitat Types) for a discussion of the impacts of this alternative on these communities.

**South Coast Live Oak Riparian Forest.** From a total of 33.2 miles of riparian habitat where Coast Live Oak Forest is the dominant vegetation type, 7.6 miles (23%) would be sold or exchanged through land disposal in this alternative. Another 2.9 miles (9%) would be available for some protective transfer, and the remaining 22.6 miles (68%) would be retained. Because land acquisitions would include at least an equal amount of viable and manageable miles of this community, this alternative is not expected to have significant negative cumulative impacts.

**Southern Cottonwood-Willow Riparian Forest.** From an estimated 3 miles of riparian habitat where this community is the dominant vegetation type, approximately 1.8 miles (59%) would be lost through land sales or exchanges in this alternative. The remaining 1.2 miles (41%) of this community would be available for some protective transfer (where disposal would be conditioned on protection of the habitat or minimal development is expected); none of this community would be retained. Even though this plant association occurs along streams throughout the south coast mountain ranges (Holland 1986), including drainages within several national forests where it would likely be protected in the future, this community is nevertheless expected to be significantly impacted by this alternative. This is because of the relatively large negative impact that land disposal would have on the lower elevations of this community's range, where most of it has or is likely to be disturbed or eradicated by development of private lands.

**Southern Interior Cypress Forest.** The designation of Cedar Canyon as an ACEC/Research Natural Area would contribute to the study and long-term conservation of a fairly unique Sycamore/Cypress Riparian Forest community that also supports Mexican flannel bush and Gander's pitcher sage. However, prescribed burning for livestock grazing objectives in the eastern portion of the Otay allotment would maintain the probability of escaped burns impacting the immature stands of this community before it reaches reproductive age. In addition, some increase in wildfire ignition frequency is expected due to increased recreational activities. Aggressive suppression and an emphasis on fire prevention/control through fuel reduction programs would reduce these impacts, but overall, this alternative is expected to have some significant negative cumulative impact on this community.

**Southern Sycamore-Alder Riparian Woodland.** Less than one-tenth of a mile of riparian habitat where this community is the dominant vegetation type would be sold or exchanged in this alternative. The remaining 0.5 miles would be available for exchange only to consolidate lands in the Border Mountains area of San Diego County. None of this community would be retained. Acquisition of land in the Dulzura and McAlmond Canyon area of the San Diego County Management Area would contribute an equal or greater amount of viable and manageable acres of this community than would be lost through disposal. This community occurs along streams throughout the South Coast mountain ranges, as well as drainages within several national forests where it would likely be protected in the future; because of this distribution, and the proposed land acquisitions involving this riparian woodland, this alternative is not expected to have any significant cumulative impact on this community.

**Southern Willow Scrub.** From an estimated 9.2 miles of riparian habitat where this community is the dominant vegetation type, 2.8 miles (30%) would be sold or exchanged through land disposal actions. A total of 0.75 miles (8%) would be available for some protective transfer and the remaining 5.6 miles (61%) would be retained. Land acquisitions in the Riverside-San Bernardino and San Diego County Management Areas are expected to contribute to the conservation of larger, more manageable segments of this community on BLM lands. This alternative would, therefore, have positive cumulative impacts on this community.

**Other Riparian Communities.** From an estimated 30.2 miles of unclassified riparian forests and 52.7 miles of unclassified riparian community located on BLM-administered lands in the South Coast Planning Area, approximately 5.8 miles (19%) and 7.4 miles (14%) respectively, would be sold or exchanged through land disposal. In addition, 0.7 miles (2%) of the unclassified riparian forest and 5.2 miles (10%) of the unclassified riparian community would be available for some protective transfer, where disposal would be conditioned on protection of the habitat or minimal development is expected. A total of 63.9 miles of these riparian communities would be retained under this alternative. The loss of riparian forest may include additional losses of South Coast Live Oak Riparian Forest community.

**Conclusion:** This alternative would have overall positive cumulative impacts on Southern Willow Scrub. It would, however, have negative cumulative impacts on Southern Cottonwood-Willow Riparian Forest and Southern Interior Cypress Forest.

## **Impacts to Open Space Values**

The primary impact to open space values would result from the disposal and subsequent development of lands. Under this alternative, it is expected that approximately 21,249 acres of public land, of which 46% is rated as either high or medium in open space values, would be disposed of and eventually developed. This impact would be compounded by the projected growth and development on private lands with the additional loss of open space.

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For the most part, open space values would be expected to be maintained on 107,213 acres of BLM land, of which 88% is rated as high or medium for open space values. These lands would either be retained under BLM management, maintained under R&PP lease, disposed of with protective conditions, or identified for transfer to the U.S. Forest Service. In addition, land ownership adjustments would add approximately 17,000 acres to public land ownership under this alternative. Open space values on these lands may be affected by actions such as prescribed burning or mineral exploration/development. The impacts of prescribed burning would, however, be minimal and of short duration. The overall impacts from the expected levels of mineral activity would also be negative but not significant.

Conclusion: Overall, open space values would be maintained on 107,213 acres of public land. Of this total 94,347 acres are rated as having either high or moderate open space value. Conservation of open space would also be enhanced by land acquisitions and consolidation. In some areas, however, open space values would be negatively impacted by the loss of 21,249 acres of public land through disposal and subsequent development, including 9,623 acres rated as high or moderate in open space value.

### Impacts to Recreation Use

This alternative will result in the provision of many new recreational opportunities and facilities, and the disposal of few lands with recreational potential. Four Special Recreation Management Areas (SRMAs) will be identified to focus development and use of areas offering exceptional recreational opportunities. These areas are Beauty Mountain, Poppet Flat, Border Mountains and Canyon Lake, and they will experience the highest levels of development and use within the planning area.

Easements will be acquired to provide for both motorized and nonmotorized access. These acquisitions and access improvements will provide new recreational opportunities, as well as improve the quality of the recreational experience. This improved access will greatly enhance the use of facilities to be constructed under this alternative.

Extensive developed facilities will be constructed under this alternative. Six campgrounds will be developed, one each at Otay Mountain, Hauser Mountain, and Mc Almond Mountain, and three at Beauty Mountain. Two of these campgrounds will be limited to use by nonmotorized recreationists. Three administrative sites will be developed for visitor contact and resource management at Otay Mountain, Poppet Flat, and Beauty Mountain. Six interpretive displays will be constructed for user information and guidance, with one each at Otay Mountain, Tecate (Kuchamaa), Hauser Mountain, and Poppet Flat, and two at Beauty Mountain.

OHV use designations will provide opportunities for motorized forms of recreation while generally limiting use to existing routes of travel, as long as the lands remain under federal management. Following land ownership adjustments, easement acquisition and new construction, it is expected that the total length of routes available for use will increase slightly from 260 to 264 miles.

Motorized vehicle closures will be made in the Cedar Canyon ACEC, and on parcels at Fern Creek, Agua Tibia, the Santa Ana River wash, Oak Mountain, and Valle Vista. Motorized vehicle use in the Tecate (Kuchamaa) ACEC will be restricted to a single existing route of travel. The Canyon Lake parcel will provide for use on two miles of route.

Development and operation of these facilities, as well as the construction of roads and trails, will potentially cause impacts, mostly of a site-specific nature. These impacts will be addressed in detail during project planning for each specific action.

The provision of a moderately high level of visitor services will be a great benefit to recreationists.

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Users will have extensive and detailed information available about recreational opportunities, resource values, and safety. Maps, guides, signs, maps, and regular management presence and contacts will greatly improve the quantity and quality of the recreational experience.

Vegetative manipulations will marginally increase recreational opportunities for deer and quail hunting and nature study, and will cause short-term visual impacts following burns.

Recreation use is expected to increase dramatically following the acquisition of access, development of facilities, and the provision of visitor services. Ongoing urban expansion and local population growth will also contribute to an increase in use from the existing 37,000 to 233,000 VUD by the year 2000. The retained parcels will generally show significantly higher levels of use, and between non-compatible recreation uses are expected to increase slightly. However, the separation of motorized and nonmotorized users on well-defined trail systems will serve to reduce the frequency of potential conflicts. The amount of use projected under this alternative is considered to be a meaningful contribution to the overall supply of outdoor recreational opportunities in the South Coast Planning Area.

Current and potential users of the disposed lands will not have the opportunity to recreate on the disposed parcels, and some displacement to other areas offering similar types of opportunities is expected, which may slightly increase recreational use and/or conflicts on those parcels.

Conclusion: Substantial benefits to the recreating public through the increased development of recreational opportunities and services would be provided by this alternative. The loss of land base from disposal actions is small, and involves lands generally offering little recreational potential. Acquired lands and easements would provide more recreational opportunities than those lost on disposed parcels. Increases in public use from 37,000 to 233,000 VUD are attributable to urban expansion, local population growth, acquisition of access, development of facilities, and the provision of visitor services. The cumulative impact of this alternative to meeting recreational supply and demand in the South Coast Planning Area would be positive and significant.

### Impacts to Mineral Development

Impacts to mineral development could result from restrictions placed on development activities (such as oil and gas lease stipulations) and from the disposal of lands with mineral potential, since their subsequent land-use development could interfere with development of mineral resources. The potential for development of a major sand and gravel deposit in the Agua Dulce area of Los Angeles County would be facilitated by the acquisition of surface ownership above existing federal mineral estate.

Eight Areas of Critical Environmental Concern (ACEC) with a total of 12,219 acres would be closed to material sales, including sand and gravel. Most of these areas are considered to have moderate potential for the occurrence of sand and gravel resources.

Oil and gas leasing stipulations under this alternative would increase development costs for new leases in some instances. Development of known reserves would not be precluded, although drilling of exploratory wells may be hampered due to application of No Surface Occupancy Stipulations.

The disposal of surface lands under this alternative would affect acreage of both moderate and high potential mineral resources administered by the BLM as shown in Table 4-5.

Impacts from land tenure adjustments will vary, depending on the mineral potential of lands acquired and the conditions under which the mineral resources are protected (i.e. recovery of fair market value, reservation, or exchange of mineral rights). Lands acquired for the protection of habitat for

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threatened and endangered species will not likely be available for discretionary mineral actions. The mining of locatable minerals under 43 CFR 3809 would be restricted to protect sensitive species.

Conclusion: Overall, negative impacts to potential mineral development would result from closure of ACECs to mineral material sales and the disposal of surface lands with mineral potential. These impacts, although negative would be low to moderate on a planning-area wide basis. However, localized impacts would be different than this planning area average due to the fact that the planning area includes several different markets. The potential for development of a major sand and gravel deposit in the Agua Dulce area of Los Angeles County would be facilitated by the acquisition of surface ownership over existing federal mineral estate. Oil and gas leasing stipulations could increase development costs and complicate exploratory efforts.

**Table 4-5. Mineral Potential of Surface Lands Available for Disposal**

Resource	Total Acres on BLM Surface	Acres Disposed	Percentage Reduction
Gold	24,490	2,589	10.6%
G e m s t o n e   a n d Dimension stone	11,931	3,370	28.2%
Metallic   a n d   n o n - metallic	30,982	6,494	20.9%
High Potential Sand and Gravel	8,852	4,131	46.6%
Moderate Potential Sand and Gravel	71,183	20,192	28.3%

### Impacts to Paleontologic Resources

The impacts of this alternative are the same as those described for Alternative 3.

### Impacts to Kuchamaa (Native American Religious Values)

Under this alternative, Little Tecate Peak could be exchanged to the private sector to consolidate public land ownership within the border mountains area. As a result, access may be denied to Native Americans who wish to use Little Tecate Peak for religious purposes. Kuchamaa (Tecate Peak) would be retained in federal ownership and consequently remain available to Native Americans. Kuchamaa would be designated an ACEC. Management prescriptions for the ACEC, including acquisition of lands adjacent to Kuchamaa and right-of-way avoidance, would enhance the natural state of the mountain and surrounding environment. This would result in the reversal of the trend in impacts to the natural state of Kuchamaa caused by the existence of the communication site on Kuchamaa and residential development in the viewshed. The disposal and subsequent development of Little Tecate Peak, however, would add to these negative impacts.

The vegetation management actions (prescribed burning) anticipated under this alternative are not expected to negatively affect Kuchamaa. Management prescriptions developed for the proposed ACEC would minimize impacts from recreation use.

Conclusion: Disposal and subsequent development of the Little Tecate Peak parcel would negatively affect Native American religious values. Kuchamaa would be protected by the management prescriptions developed for the proposed ACEC, including acquisition of lands adjacent to Kuchamaa and right-of-way avoidance, resulting in a significant positive impact to Native American religious values.

**Impacts to Watershed  
(Beauty Mountain Management Area)**

The impacts of this alternative on sensitive soil and watershed resources would be the same as for Alternative 1.



## Preferred Alternative

The preferred alternative is the combination of Alternative 1 as developed for the Los Angeles-Orange County Management Area and Alternative 3 as developed for each of the other management areas.

## Reasonably Foreseeable Development

### Lands Actions

Regional land use and growth projections are the same as described for Alternative 1.

Lands actions are the same as those described for Alternative 3 except that land acquisitions for the Santa Clara River corridor would not take place, and an additional 976 acres in Los Angeles County would be considered suitable for jurisdictional exchange with the U.S. Forest Service.

### Recreation Actions

Recreation management actions and projected use would be the same as those described for Alternative 3, except that there would be 4,000 less VUDs projected as a result of not acquiring lands within the Santa Clara River corridor in Los Angeles County.

### Mineral Development

**Sand and Gravel Development.** Development would be the same as described for Alternative 3.

**Oil and Gas Development.** Reasonably foreseeable development of oil and gas is expected to be very similar to that described for Alternative 1. It is expected, however, that the application of no surface occupancy stipulations to additional areas in the Riverside-San Bernardino County Management Area may alter the locations and/or methods of some of the exploratory drilling. The total amount of drilling activity and related surface disturbance, however, is expected to be the same.

**Locatable Mineral Development.** Development would be the same as described for Alternative 3. In most areas, development of locatable mineral resources is expected to be the same as described for Alternative 1.

### Vegetation Management Actions

Vegetation management actions are the same as those described for Alternative 3.

## Environmental Consequences

### Impacts to Wildlife

#### Federally Listed or Proposed Species

**Unarmored Three-spined Stickleback.** Refer to Alternative 1 for a discussion of the current status of this fish.

This endangered species does not occur on lands administered by the BLM. Its range within the Santa Clara River is, however, adjacent to several small BLM parcels and is downstream of 2,819

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acres of BLM surface land and 21,806 acres of subsurface mineral split-estate with high to medium potential for aggregate material extraction and/or oil and gas development. The reasonably foreseeable development of these resources over the next 20 years is expected to result in the disturbance of up to 600 acres for sand and gravel extraction and the development of 100 oil and gas wells. This puts the species in a position of potentially being affected from secondary impacts related to oil spills and sand and gravel extraction, including increased sediment loads.

**Conclusion:** Under this alternative there would be a negative, but not significant, cumulative impact to unarmored three-spine stickleback. State requirements, BLM standard stipulations and a controlled surface occupancy stipulation on upstream areas would control the indirect impacts to unarmored three-spined stickleback in the typical mineral development scenario. (These impacts are the same as those discussed for Alternative 1.)

**California Condor.** Refer to Alternative 1 for a discussion of the current status of this bird.

In this alternative, the sale or exchange of 3,596 acres of BLM-administered land would result in the loss of 442 acres of the 780 acres of condor core range administered by BLM. An additional 3,073 acres within the area identified as the limit of the condors' main range would be lost and would be impacted by expected low density development (one dwelling unit per 40 acres).

The development of sand and gravel resources on federal mineral split-estate in the management area is expected to impact up to 600 acres of potential habitat (habitat outside of the core area) of the California Condor. At present, 18% of the identified condor habitat within the planning area has been classified as having a moderate to high potential for oil and gas development. Oil and gas development on public lands is expected to create 100 acres of new surface disturbance in association with well drilling and ancillary facilities. Approximately 50% of the drilling activity would occur in existing oil fields in the area delineated as condor core habitat.

**Conclusion:** Impacts to condors from the land tenure adjustments proposed in this alternative are expected to be negative but not significant due to: (a) the small size of the parcels identified for disposal, (b) the extremely small acreage involved relative to the condor's identified core and home range area, and (c) the limited opportunity for residential development on most of the parcels due to topography. Of the more than 900,000 acres of identified California Condor habitat within the management area, up to 700 acres, above subsurface federal mineral split-estate, would be impacted through the development of mineral resources. Of this 700 acres, only 50 acres would occur within the area identified as core habitat and this would be within an already existing oil field. Consequently, cumulative impacts to California Condors would be negative but not significant. (These impacts are the same as those discussed for Alternative 1.)

**Stephens' Kangaroo Rat.** Refer to Alternative 1 for a discussion of the current status of this species.

In this alternative, the BLM would pursue acquisition, through land exchange, of the entire Steele Peak Reserve. Twenty-three parcels, including 12 parcels (1,862 acres) within other reserve study areas and 11 other parcels (1,958 acres) containing 296 acres of occupied habitat (Montgomery 1989, RECON 1990), would be available for exchange for the sole purpose of acquiring 9,600 acres within the proposed Steele Peak Reserve. These exchanges would consolidate public ownership around four existing parcels (1,540 acres) of BLM-administered land within the Steele Peak reserve study area.

The 12 BLM parcels within other reserve study areas would be exchanged to other government agencies or groups acting on behalf of the reserve system to ensure the protection of SKR habitat. These parcels, totaling 1,862 acres, include 447 acres of known habitat and an additional 7 acres of potential SKR habitat. It is expected that, even if retained by the BLM, the 11 parcels outside of

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reserve study areas would be surrounded by development within the next 15 years. SKR habitat on these parcels would become further fragmented, with associated SKR populations becoming increasingly isolated and possibly extirpated within the next 20 years. Any BLM-administered parcels within current reserve study areas that are not selected as final SKR reserves would be available for exchange to acquire lands within the Steele Peak Reserve.

OHV use of existing routes on lands retained by the BLM will increase with encroaching development and population growth. This increased use, coupled with the inability of law enforcement to provide continual patrol in a given area, would result in additional unplanned routes of travel and an increase in cross-county use. Impacts to Stephens' kangaroo rat would occur through direct mortality of individuals from burrow collapse and indirectly from habitat degradation. Based on the analysis of 760 acres of occupied habitat located outside of SKR reserve study areas (identified in the Habitat Conservation Plan) less than six acres of new disturbance is expected over 20 years, resulting in the death of less than 12 animals (Hicks and Cooperrider 1977, Montgomery 1989, and O'Farrell and Uptain 1989, RECON 1990). Conversely, this level of OHV activity is expected to enhance opportunities for SKR movement/pioneering activity by increasing the number of dirt roads linking SKR habitats to pockets of potential habitat.

**Conclusion:** This alternative would have a significantly positive impact on Stephens' kangaroo rat. The BLM would pursue the acquisition of the remaining lands within the Steele Peak Reserve (9,600 acres). In addition, BLM lands in other reserve study areas would be available only for inclusion in the SKR reserve system. The 3,517 acres of occupied and potential habitat on BLM parcels outside of reserve study areas would be exchanged for land within the Steele Peak Reserve. Habitat values on acquired lands are expected to be similar to those exchanged out of federal ownership. No net loss of Stephens' kangaroo rat habitat under BLM administration is expected. The exchange, however, of these smaller units of SKR habitat would result in a more consolidated block on SKR habitat under BLM management, improving manageability and the long-term viability of the habitat to support Stephen's kangaroo rat. The anticipated increase in OHV use on parcels which remain in public ownership would have some minor negative short-term impacts on SKR through direct mortality, but this impact would not significantly impact the population as a whole. (These impacts are the same as those discussed for Alternative 3.)

**Least Bell's Vireo.** Refer to Alternative 1 for a discussion of the current status of this bird.

Least Bell's Vireos have been recorded on only one parcel administered by the BLM within the planning area. Several pairs were observed in April of 1988 on this parcel (190-321) in the Warm Springs drainage, a tributary of Murrieta Creek (G. Bell pers. comm.). This parcel is isolated by development from the closest major subpopulation in the Santa Margarita River and is slated for protective disposal in this alternative.

Eighteen other BLM parcels contain 12.9 miles of riparian systems with well-developed understories (shrub willows were used as an indicator species) and are considered as potential habitat. In this alternative, two of these parcels, containing 3.2 miles of potential habitat around Canyon Lake would be exchanged to consolidate land within the Steele Peak Reserve. Three parcels containing 0.3 miles of potential habitat would be sold or exchanged in this alternative. One parcel with 0.3 miles of potential habitat would be available for R&PP lease. The remaining twelve parcels containing 9.1 miles of potential habitat would be retained. These parcels contain some well-developed riparian segments within the Santa Margarita River drainage, including 0.3 miles in Rainbow Creek, 1.45 miles along the Santa Margarita River itself and 0.86 miles in Fern Creek and a 0.6 mile segment located three miles north of the Santa Margarita River.

The acquisition of a substantial amount of riparian habitat in this alternative would benefit Least Bell's Vireo. Three miles of potential moderate quality habitat within the proposed Steele Peak

Reserve, and an undetermined amount of high quality nesting habitat along the Santa Margarita River would be acquired under this alternative.

Conclusion: Cumulative impacts to Least Bell's Vireo under this alternative would be significant and positive. Virtually all of the best potential habitat administered by the BLM would be retained, and the acquisition of riparian areas in this alternative would add substantially to the amount of suitable habitat administered by the BLM. It is likely that some of the acquired lands may support breeding populations of Least Bell's Vireo, particularly along the Santa Margarita River. The consolidation of habitat under public ownership would increase the manageability of riparian systems, including cowbird control.

## Candidate Species

**Wright's Checkerspot Butterfly.** The only known population of this butterfly occurs in the vicinity of Oak Mountain (Ballmer, pers. comm.). This species of butterfly is reported to be associated with both clay soils and a host plant, dot-seed plantain (*Plantago erecta*). The retention of existing BLM lands and the acquisition of 640 acres in the Oak Mountain area would protect both the larval food source and the habitat which the larval form of this butterfly uses to avoid desiccation during drought periods. This would significantly enhance the survival opportunities for this butterfly by protecting the habitat used for both forage and protection from climactic extremes for its only known extant population.

Conclusion: Acquisitions in Oak Mountain area under this alternative would have a highly positive and significant impact on Wright's checkerspot butterfly. Cumulative impacts under this alternative would be positive and significant. (These impacts are the same as those discussed for Alternative 3.)

**California Gnatcatcher.** Refer to Alternative 1 for a discussion of the natural history of this bird.

Based on key habitat components (coastal sage scrub with California sagebrush and California buckwheat), it is concluded that 36 public parcels within the planning area contain 5,084 acres of suitable habitat for this species. California Gnatcatchers have been recorded recently on eight of these parcels. In this alternative, 2,856 acres of suitable habitat would be retained, including three parcels with recent California Gnatcatcher records. Four parcels (487 acres), two of which have California Gnatcatcher records, would be sold and two parcels (75 acres) with potential habitat would be available for consolidation exchange. The remaining 1,666 acres, including three parcels with California Gnatcatcher records, would be exchanged for land within the Steele Peak Reserve. Of the eight parcels with recent gnatcatcher records, three parcels would be retained. Four of the five parcels being sold or exchanged are relatively small, containing 40 acres or less. One larger 297-acre parcel would also be sold. These losses are offset by the acquisition of up to 11,580 acres, much of which is coastal sage scrub, within the Steele Peak Reserve and in other areas. It is expected that at least some of this coastal sage scrub would be potential, if not occupied habitat for California Gnatcatcher. The consolidation of coastal sage scrub in these areas would result in a net gain of this key habitat type under BLM administration. In addition, the exchange of smaller more scattered parcels with coastal sage scrub for the larger blocks of this habitat type within the Steele Peak Reserve and in the vicinity of Otay Mountain, the Santa Margarita River and the Badlands area would improve both the manageability and the long-term viability of BLM-administered coastal sage scrub, an expected benefit for California Gnatcatcher.

Impacts from mineral resources development is expected on up to 32 acres contained within seven parcels. In addition, the areas surrounding these mining sites would be degraded by noise, traffic, etc., so that the effective area lost to California Gnatcatcher is estimated at about 26 acres per developed well or 150 acres total development.

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Conclusion: This alternative would have a positive cumulative impact on California Gnatcatcher. Of the 5,084 acres of suitable habitat within the planning area, 11% would be sold or exchanged. A total of 56% would be retained and 33% would be exchanged to consolidate land in the Steele Peak Reserve, probably without a net loss of suitable habitat under BLM administration. The acquisition of coastal sage scrub habitat primarily at the Steele Peak Reserve but also in the areas of the Santa Margarita River, the Badlands, and Otay Mountain would have additional benefits for California Gnatcatcher populations. Impacts to California Gnatcatcher from mining would be negligible because of the limited acreage involved. (These impacts are the same as those discussed for Alternative 3.)

**Orange-throated Whiptail.** Refer to Alternative 1 for a discussion of the current status of this lizard.

Orange-throated whiptail have been recorded recently on nine BLM parcels containing 4,316 acres within the planning area. These nine parcels are widely dispersed throughout southwestern Riverside County and eastern San Diego County. In this alternative, three of these parcels (554 acres) would be sold or exchanged, four parcels (930 acres) would be exchanged to consolidate land within the Steele Peak Reserve, one parcel (2,832 acres) would be retained. Land acquisitions under this alternative would benefit orange-throated whiptail, particularly the acquisition of coastal sage scrub habitat at Steele Peak, Santa Margarita River, the Badlands, and Otay Mountain. In this alternative, three of the parcels (1,518 acres) with probable occurrence would be retained under BLM administration and one (80 acres) would be exchanged for BLM acquisitions elsewhere.

Impacts from mineral resources development are expected on up to 32 acres contained in seven parcels and would not be significant.

Conclusion: This alternative would have a low to moderate positive impact on orange-throated whiptail. The sale or exchange of seven parcels (1,484 acres) of known habitat to the private sector and the impacts related to eventual development are offset by the acquisition and consolidation of coastal sage scrub habitat, primarily in the Steele Peak area but also in four other areas within the planning area. The exchange of smaller parcels for larger blocks of suitable habitat would increase the manageability of whiptail habitat under BLM administration. The long-term impact is expected to be positive on BLM land. However, the cumulative regional impacts to orange-throated whiptail is not expected to be significant. (These impacts are the same as those discussed for Alternative 3.)

**Southwestern Pond Turtle.** Brattstrom and Messer (1988), in their report to the California Department of Fish and Game, stated that this turtle is currently found in only a few widely separated localities. The authors suggest several locations as possible areas for southwestern pond turtle management/mitigation-compensation. None of the recommended management areas contain BLM lands. They also document a small population in Lake Wohlford; this would marginally include the adjacent parcels administered by BLM: 247-331 and 247-332, both of which would be retained in this alternative. Neither of these parcels are known to actually support pond turtles. In addition, the BLM administers 1.5 miles along the Santa Margarita River. This river is known to support southwestern pond turtles downstream, where they are associated with beaver ponds near Fallbrook. Beaver ponds also exist on the BLM-administered segments of the river and could support southwestern pond turtles. These parcels would be retained under this alternative and the planned acquisition of 300 acres along the Santa Margarita River would ensure the long-term viability of this habitat.

Conclusions: The acquisition of land along the Santa Margarita River would improve the long-term viability of this habitat and have a positive impact on southwestern pond turtle; however, the cumulative impacts are not expected to be regionally significant to the species.

## Game Species

Habitat for mule deer would be impacted through the disposal and eventual development of 2,836 acres of potential deer habitat (parcels greater than 600 acres) administered by the BLM. Furthermore, a net loss from the planning area of 8,948 acres of potential quail habitat is expected as a result of the habitat destruction of up to 25% of the 35,791 acres available for disposal in this alternative. This destruction of habitat is anticipated due to the eventual development of lands transferred from federal into private ownership.

In addition to the losses of game habitat resulting from land tenure adjustments, game habitat is also expected to be impacted by OHV use due to encroaching development and population growth and would result in a limited number of additional unplanned routes of travel and a slight increase in cross county use. This type of recreation use, coupled with the expected increase in visitor use days as a result of camp ground development, establishment of new trails, and easement acquisition would create a disruptive and detrimental impact to resident large animal populations. It is estimated that less than two percent of existing deer range in the planning area would be affected directly or indirectly by this activity.

Losses to game habitat would also occur as the result of mining activity. It is expected that up to 200 acres of game habitat would be lost as a result of strip mining for tungsten or other mineral deposits in the southeastern portion of the Beauty Mountain Management Area. In addition, the areas surrounding these mining sites would be degraded by noise, traffic, disruption of movement patterns, etc., creating an effective loss of 2,000 acres of mule deer habitat.

These impacts from land disposal, recreation use, and mineral development would be offset by the expected acquisition of 21,501 acres to consolidate public lands. This consolidation would help facilitate vegetation management, primarily controlled burns of decadent chaparral, resulting in an expected increase of 3,200 acres of quality early seral vegetation over a 12,800 acre area during any 10-year period.

Conclusion: A total of 6,718 acres of BLM-administered deer habitat would be lost through all actions considered in this alternative. Offsetting these impacts is the expected acquisition of 21,501 acres to consolidate public lands. This consolidation would help facilitate vegetation management, primarily controlled burns of decadent chaparral resulting in the expected increase of 3,200 acres of quality early seral vegetation over a 12,800 acre area during any 10-year period. In concert this would equate to a net gain of 27,583 acres (or a 29% increase) over the existing acreage of deer habitat on BLM-administered lands. A net gain of 14,783 acres of quail habitat is possible under this alternative. These habitat gains are expected to have a highly positive impact to mule deer populations and quail populations relative to the extent of habitat used by these species on BLM lands planning area. From a regional perspective, however, the cumulative impacts are expected to be of low to moderate importance. (These impacts are the same as those discussed for Alternative 3.)

## Important Wildlife Habitat Types

For a general discussion of important wildlife habitat types refer to Alternative 1.

**Coastal Sage Scrub.** In this alternative, 4,244 acres (39%) of the total 10,817 acres of manageable coastal sage scrub (coastal sage scrub in blocks of 30 acres or more) would be sold or exchanged and could be impacted by subsequent development. A total of 920 acres (9%) of manageable coastal sage scrub would be available for some protective disposal or R&PP lease, and the remaining 5,653 acres (52%) would be retained. Offsetting the loss of this habitat from federal ownership is the acquisition of approximately 11,680 acres, much of it coastal sage scrub, in the vicinity of Steele

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Peak, Otay Mountain, Santa Margarita River and the Badlands. The exchange of smaller more scattered parcels with coastal sage scrub for the larger blocks of this habitat type within the Steele Peak Reserve and other areas would improve both the manageability and the long-term viability of BLM-administered coastal sage scrub.

**Riparian Systems.** In this alternative, 20.7 miles (16% of the total 130 miles of riparian habitat within the planning area) would be sold or exchanged and could be subsequently developed. Of the riparian area lost from federal ownership, 12.8 miles are considered to be manageable riparian habitat (riparian segments 0.5 miles or more in length). A total of 13.3 miles (10%) of the total riparian habitat would be available for some protective transfer or R&PP lease, including 9.7 miles of manageable riparian habitat. The remaining 96.4 miles of total riparian habitat (89 miles of manageable riparian habitat) would be retained under this alternative. A total of 14 miles of manageable riparian habitat would be acquired through acquisition/exchange actions in this alternative.

In addition to impacts associated with lands actions, negative impacts to riparian and coastal sage scrub communities would result from OHV use. These expected impacts would result from physical damage to plants within these communities, and from accelerated soil erosion due to increased OHV. Increases in OHV use of existing routes are expected to accompany encroaching development and population growth, resulting in additional unplanned routes of travel and an increase in cross-county use.

**Conclusion:** As a result of land tenure adjustments, the net amount of coastal sage scrub habitat under BLM administration is expected to increase. Thirty-nine percent of the manageable coastal sage scrub administered by BLM would be sold or exchanged in this alternative; 9% would be available for protective transfer or R&PP lease; and 52% would be retained by the BLM. After land tenure adjustments, the BLM would have increased its coastal sage scrub holdings by nearly 6500 acres, a 60% increase. The acquisitions proposed in this alternative represent a highly positive impact on coastal sage scrub habitats on BLM-administered lands. Eleven percent of the manageable riparian habitat in the planning area would be sold or exchanged; 9% would be available for protective disposal; and 80% would be retained by the BLM. Acquisitions of riparian habitat within the Steele Peak Reserve and along the Santa Margarita River would partially offset the loss of riparian habitat from federal ownership in other areas. On a regional basis, the cumulative impacts to these habitat types would not be significant. (These impacts are the same as those discussed for Alternative 3.)

### Impacts to Vegetation

#### Federally Listed Species

**Santa Ana River woolly-star (*Eriastrum densifolium* ssp. *sanctorum*).** The only known populations on BLM-administered land and most of the potential habitat for this shrub on BLM lands, would be managed within the Santa Ana River Wash ACEC for the conservation and recovery of this species. There would be a positive cumulative impact to this plant under this alternative.

**Slender-horned spineflower (*Dodecahema leptoceras*).** The only known populations on BLM-administered land, and all of the potential habitat for this annual on BLM lands, would be managed within the Santa Ana River Wash ACEC for the conservation and recovery of this species. Acquisition of potential habitat in the Valle Vista area would further enhance its conservation. There would be a positive impact to this plant under this alternative, and no negative cumulative impacts.

### State-Listed Species

**California orcutt grass (*Orcuttia californica*).** Potential habitat for this species on BLM-administered land would be reduced, by approximately 5% through the disposal of lands south of Steele Peak for acquisition of Stephens' kangaroo rat habitat within the Steele Peak area. Some potential habitat for California orcutt grass is likely to be acquired during this land action, but a net loss is nevertheless expected. Because populations of this species have already been extirpated in Los Angeles County and are likely to become extirpated in southwestern San Diego County, impacts associated with land disposal actions in this alternative would result in a significant negative cumulative impact.

**Mexican flannel bush (*Fremontodendron mexicanum*).** Negative impacts on this species are expected from increased wildfire frequency at Otay Mountain and Tecate Peak combined with increased off-road vehicle activities, both due to increased accessibility. Aggressive fire suppression to keep fire rotations at a 40 to 50-year interval would keep these impacts to a level of non-significance. In addition, the creation of the Cedar Canyon ACEC/Research Natural Area would promote special management for the protection and recovery of this species. It is expected that there would be an overall positive impact under this alternative, and there would be no negative cumulative impacts.

**Munz's onion (*Allium fimbriatum* var. *munzii*).** Potential habitat for this species on BLM-administered lands would be reduced by approximately 10% through the disposal of lands west of Steele Peak used to acquire Stephens' kangaroo rat habitat within the Steele Peak area. Approximately the same amount of potential habitat for this species is likely to be acquired during this land action, and no net impact is expected as a result. Additionally, the creation of the Steele Peak ACEC/Research Natural Area and its withdrawal from mineral entries would promote management for the conservation of this species. There would, therefore, be no negative cumulative impacts under this alternative.

**Nevin's barberry (*Mahonia nevinii*).** Although some impact to potential habitat would occur in the Castaic Lake area from R&PP lease development and oil and gas exploration, the only known population on BLM-administered lands would be preserved at Oak Mountain. Acquisition of potential habitat at Oak Mountain as well as special management actions to conserve this species would benefit this species and enhance its recovery. On balance, this alternative would have a positive significant impact on this species.

**Slender-pod jewelflower (*Caulanthus stenocarpus*).** The exchange of lands in the Tule Valley area would reduce by 10%, overall, the potential habitat for this species on BLM-administered land. Very little potential habitat would be acquired as a result of these exchanges, so that a net loss of habitat in this region is expected. However, land exchanges in the southern San Diego area would result in a net increase of potential habitat for this species in the Dulzura-Potrero area. The net impact is expected to be insignificant. Because known populations and potential habitat within the Cleveland National Forest are not expected to be impacted in the future, and because acquisition of potential habitat in the Dulzura-Potrero area is expected to enhance conservation of this species, no cumulative negative impact is expected under this alternative.

### BLM-Sensitive Species

**Johnston's rock cress (*Arabis johnstonii*).** All of the potential habitat for this species on BLM-administered land is contained in two small parcels and would be sold in this alternative. However, because known populations and most of the potential habitat occur in the nearby San Bernardino National Forest, and would be likely to be protected in the future, this impact is not expected to be significant cumulatively. (These impacts are the same as those discussed for Alternative 2.)

**Many-stemmed dudleya (*Dudleya multicaulis*).** Potential habitat for this species on BLM-administered



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land is located west of Steele Peak. Approximately 25% of this potential habitat would be subject to disposal through land exchanges to acquire Stephens' kangaroo rat habitat within the Steele Peak Reserve. Little potential habitat for this species would be acquired during these land exchanges, and therefore a net loss is expected. While populations of this species occur in the San Bernardino and Angeles National Forests, the current range is fairly limited. The transfer of this potential habitat to the private sector and the probable development therefore represents a significant and negative cumulative impact. (These impacts are the same as those discussed for Alternative 1.)

**Palmer's grapplinghook (*Harpagonella palmeri* var. *palmeri*).** Both the acquisition of potential habitat at Oak Mountain and special management actions to conserve this species and promote its recovery in the same area would have positive impacts under this alternative. There would be no negative cumulative impact under this alternative. (These impacts are the same as discussed for Alternative 3.)

**Payson's jewelflower (*Caulanthus simulans*).** Potential habitat for this species on BLM-administered lands in the Tule Valley area, in various parts of the Riverside-San Bernardino Management Area, and in the La Posta area would be reduced overall by approximately 15%. Land acquisition just south of the La Posta area would partly compensate for habitat losses elsewhere. The known populations at Oak Mountain would be retained and managed for their conservation and recovery, and acquisition of potential habitat at Oak Mountain would further enhance the survival of this species in that area. Overall, this alternative is expected to have a significant positive impact on this species. There would be no cumulative negative impacts, since other populations on U.S. Forest Service lands are expected to be protected as well. (These impacts are the same as discussed for Alternative 3.)

**San Diego rattleweed (*Astragalus oocarpus*).** All of the potential habitat on BLM-administered lands, contained in three small parcels adjacent to the Cleveland National Forest, would be sold. Since most known populations and the greatest part of the potential habitat for this species are located within that national forest, and are likely to be protected in the future, the cumulative impact would not be significant. (These impacts are the same as those discussed for Alternative 2.)

**San Felipe monardella (*Monardella nana* ssp. *leptosiphon*).** Potential habitat on public lands would be reduced, overall, by approximately 10% through the exchange of the western part of the Beauty Mountain WSA. Acquisition of lands in the eastern part of the WSA would not compensate for the potential habitat transferred from federal ownership. Potential habitat (primarily in the Beauty Mountain Management Area) would be impacted by prescribed burning at frequencies of more than one burn per 10 years at elevations above 4500 feet. Avoidance of short-rotation prescribed burning above 4500 feet would alleviate this impact. In addition, less than 5% of the potential habitat would be impacted by an increase in wildfire frequency associated with a moderate increase in visitor use and recreational activities. However, since most of the potential range and known occurrences for this species are located within the Cleveland National Forest, and are not likely to be disturbed in the future, the cumulative impacts of this alternative would not be significant.

**San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*).** Up to 50% of the potential habitat on BLM-administered land (primarily in the Hasley Canyon area, based on historic records) would be sold and subject to development. Since most of the habitat for this species (historically in the San Fernando Valley and Los Angeles areas) has been impacted by development, the cumulative impact would be negative and significant. (These impacts are the same as those discussed for Alternative 1.)

**Tecate cypress (*Cupressus forbesii*).** The designation of Cedar Canyon as an ACEC/Research Natural Area would contribute to the conservation of this species. A moratorium on prescribed burning for livestock grazing objectives in the eastern portion of the Otay allotment would reduce the probability of escaped burns to impact the immature stands of this species before they reach

reproductive age. Some increase in wildfire ignition frequency is expected due to increased recreational activities. Aggressive suppression and an emphasis on fire prevention/control through fuel reduction programs would reduce this impact to non-significance. Overall, this alternative is expected to have significant positive impacts on this species. (These impacts are the same as those discussed for Alternative 3.)

**Conclusion:** This alternative would enhance the conservation of two federally-listed species in the Santa Ana River wash area: the Santa Ana River woolly-star and the slender-horned spineflower. It would also benefit three state-listed species and/or their potential habitats: Mexican flannel bush, Munz's onion and Nevin's barberry, and three BLM-sensitive species: Palmer's grapplinghook, Payson's jewelflower and Tecate cypress. This alternative would have, however, significant negative cumulative impacts on the potential habitat of California orcutt grass, a state-listed species. This is largely due to land exchange actions resulting in habitat loss on public land while most of the other potential habitat would likely be impacted by continuing development of private lands. It would also have significant negative impacts on potential habitat for many-stemmed dudleya, a BLM-sensitive species. It may impact the potential habitat of the San Fernando Valley spineflower in the Hasley Canyon area.

### **Sensitive Plant Communities**

**Engelmann Oak Woodland.** All of the estimated 45 acres of this community on BLM-administered lands would be subject to sale or exchange in this alternative. Because most of this community type is located within the Cleveland National Forest, and is likely to be protected in the future, this would not represent a significant cumulative impact. (These impacts are the same as discussed for Alternative 3.)

**Riversidean and Diegan Sage Scrub.** See the Wildlife section (refer to impacts on coastal sage scrub under Important Wildlife Habitat Types) for a discussion of the impacts of this alternative on these communities.

**South Coast Live Oak Riparian Forest.** A total of 33.2 miles of riparian habitat occur on BLM lands throughout the planning area where South Coast Live Oak is the dominant vegetation type. Of this total, approximately 4.5 miles (13%) would be available for sale or exchange to the private sector, and could be subsequently developed. Another 2.9 miles (9%) of live oak forest would be available for protective transfer and the remaining 25.8 miles (78%) would be retained. Because land acquisitions in the Riverside-San Bernardino, Beauty Mountain, and San Diego County Management Areas would contribute more viable and manageable acres of this community than would be lost through disposal actions, this alternative would have positive impacts on this community, with no negative cumulative impacts. (These impacts are the same as those discussed for Alternative 3.)

**Southern Cottonwood-Willow Riparian Forest.** From a total of 3 miles of riparian habitat where this community is the dominant vegetation type, approximately 1.7 miles (55%) would be lost through sale or exchange actions in this alternative. An additional 1.1 miles (36%) would be available for protective transfer, and the remaining 0.3 miles (9%) would be retained. Even though this plant association is found along streams throughout the South Coast mountain ranges (Holland 1986), including drainages within several national forests where it would likely be protected in the future, this community is nevertheless expected to be significantly impacted by this alternative. This is because of the relatively large negative impact that land disposal would have on the lower elevations of this community's range, where most of it has or is likely to be disturbed or eradicated by the development of private lands.

**Southern Interior Cypress Forest.** The designation of Cedar Canyon as a ACEC/Research Natural Area would contribute to the study and long-term conservation of a fairly unique Sycamore/Cypress

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Riparian Forest community that also supports Mexican fremontia and Gander's pitcher sage. A moratorium on prescribed burns for livestock grazing objectives in the eastern portion of the Otay allotment would reduce the probability of escaped burns to impact the immature stands of this community before it reaches reproductive age. Some increase in wildfire ignition frequency is expected due to increased recreational activities. Aggressive suppression and an emphasis on fire prevention/control through fuel reduction programs would reduce this impact to non-significance. Overall, this alternative is expected to have significant positive cumulative impacts on this community, and no negative cumulative impact. (These impacts are the same as those discussed for Alternative 3.)

**Southern Sycamore-Alder Riparian Woodland.** An estimated 0.5 miles of riparian habitat occurs on BLM lands in the planning area where Southern Sycamore-Alder Riparian Woodland is the dominant vegetation type. In this alternative, all of this riparian type would be available for sale or exchange, and would be subject to development. This land, however, would be available for exchange only to consolidate lands in the Border Mountains area of San Diego County. Land acquisitions in the Dulzura and McAlmond Canyon area of the San Diego County Management Area would contribute to the conservation of a larger total amount of viable and manageable acres of this community than would be lost through disposal. Because of these acquisitions, land actions in this alternative should result in positive impacts to this community on BLM-administered lands. However, because this community occurs along streams throughout the South Coast mountain ranges (Holland 1986) as well as within several national forests where it would likely be protected in the future, no significant cumulative impacts are expected regionally. (These impacts are the same as those discussed for Alternative 3.)

**Southern Willow Scrub.** From an estimated 9.2 miles of riparian habitat where Southern Willow Scrub is the dominant vegetation type, a total of 5.3 miles (58%) would be lost through land disposal actions. An additional 0.8 miles (8%) would be available for some protective transfer, and the remaining 3 miles (34%) would be retained. Land acquisitions in the Riverside-San Bernardino and San Diego County Management Areas are expected to contribute to the conservation of larger, more manageable segments of this community on public lands. This alternative would, therefore, have positive impacts on this community, and no negative cumulative impacts. (These impacts are the same as those discussed for Alternative 3.)

**Other Riparian Communities.** From an estimated 30.2 miles of unclassified riparian forests, and 52.7 miles of unclassified riparian community located on BLM-administered land in the South Coast Planning Area, 3.2 miles (10%) and 5.5 miles (10%) respectively, would be available for sale or exchange. A total of 2.3 miles (8%) of unclassified riparian forest and 4.6 miles (9%) of the unclassified riparian community would be available for some protective transfer, where disposal would be conditioned on protection of the habitat or minimal development is expected. A total of 67.3 miles of these communities would be retained. This loss of riparian forest may include additional losses of South Coast Live Oak Riparian Forest community.

Conclusion: This alternative would have overall positive impacts on South Coast Live Oak Riparian Forest, Southern Sycamore-Alder Riparian Woodland, Southern Willow Scrub and Southern Interior Cypress Forest. It would, however, have a negative cumulative impact on Southern Cottonwood-Willow Riparian Forest.

### Impacts to Open Space Values

The primary impact to open space values would result from the disposal and subsequent development of lands. Under this alternative, it is expected that approximately 15,555 acres, of public land of which 43% is rated as either high or medium in open space values, would be disposed of and eventually developed. This impact would be compounded by the projected growth and

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development on private land with the additional loss of open space.

For the most part, open space values would be expected to be maintained on 112,907 acres of BLM land of which 87% is rated as having high or medium open space values. These lands would either be retained under BLM management, maintained under R&PP lease, disposed of with protective conditions, or identified for exchange with the U.S. Forest Service. In addition land ownership adjustments would add approximately 23,000 acres to public land ownership under this alternative. Open space values on these lands may be affected by actions such as prescribed burning or mineral exploration/development. The impacts of prescribed burning would, however, be minimal and of short duration. The overall impacts from the expected levels of mineral development activity would also be negative but not significant.

Conclusion: Overall, open space values would be maintained on 112,907 acres of public land. Of this total, 98,229 acres are rated as having either high or moderate open space values. Conservation of open space would also be enhanced by land acquisitions and consolidation. In some areas, however, open space values would be negatively impacted by the loss of 21,249 acres of public land through disposal and subsequent development, including 6,689 acres rated as having high or moderate open space value.

### Impacts to Recreation Use

The preferred alternative, consisting of Alternative 3 management actions for the Riverside-San Bernardino, Beauty Mountain, and San Diego Management Areas, and Alternative 1 (No Action) for the Los Angeles-Orange County Management Area, will result in the provision of many new recreational opportunities and facilities, and the disposal of relatively few lands with recreational potential.

Three Special Recreation Management Areas (SRMAs) will be identified to focus development and use of areas offering exceptional recreational opportunities. These areas are Beauty Mountain, Poppet Flat, and the Border Mountains, and they will experience the highest levels of development and use within the planning area. Impacts from development and use are expected to occur, and will be mitigated through careful facility design, construction, and management.

Easements will be acquired to provide for both motorized and nonmotorized access. These acquisitions and access improvements will provide new recreational opportunities, as well as improve the quality of the recreational experience. This improved access will greatly enhance the use of facilities to be constructed under this alternative.

A number of developed facilities will be constructed under this alternative. Four campgrounds will be developed, one each at Otay Mountain, Hauser Mountain, and two at Beauty Mountain (2). Two of these campgrounds will be limited to use by nonmotorized recreationists. Three administrative sites will be developed for visitor contact and resource management, with one each at Otay Mountain, Poppet Flat, and Beauty Mountain. Six interpretive displays will be constructed for user information and guidance, with one each at Otay Mountain, Tecate (Kuchamaa), Hauser Mountain, Beauty Mountain, and two at Poppet Flat.

The OHV designations in this alternative will provide opportunities for motorized forms of recreation while generally limiting use to existing routes of travel on most parcels, as long as the lands remain under federal management. Following land tenure adjustment actions, the available mileage of motorized vehicle recreational routes will decrease slightly, from the existing 260 to 250 miles. Because the Santa Clara River parcels will not be acquired, three miles of new access will not be acquired. Motorized vehicle closures will be made in the Cedar Canyon ACEC, and on parcels at Fern Creek, Agua Tibia, the Santa Ana River wash, Oak Mountain, and Valle Vista. Motorized vehicle

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use in the Tecate (Kuchamaa) ACEC will be restricted to a single existing route of travel. The Canyon Lake parcel will provide for use on two miles of route.

Development and operation of these facilities, as well as the construction of roads and trails, will cause both long-term and short-term impacts, mostly of a site-specific nature. These impacts will be addressed in detail during project planning for each specific action.

The provision of a moderate level of visitor services will be a great benefit to recreationists. Users will have information available about recreational opportunities, resource values, and safety. Maps, guides, signs, maps, and regular management presence and contacts will greatly improve the quantity and quality of the recreational experience.

Vegetative manipulations will marginally increase recreational opportunities for deer and quail hunting and nature study, and will cause short-term visual impacts following burns.

Recreation use is expected to increase dramatically following the acquisition of access, development of facilities, and the provision of visitor services. Loss of recreational opportunities on disposed parcels is expected to be minimal due to the insignificant levels of use and opportunities they contain. Ongoing urban expansion and local population growth will also contribute to an increase in use from the existing 37,000 to 157,000 VUD by the year 2000. The retained parcels will generally show significantly higher levels of use, and between non-compatible recreation uses are expected to increase somewhat. However, the separation of motorized and nonmotorized users on well-defined trail systems will serve to reduce the frequency of potential conflicts. The amount of use projected under this alternative is considered to be a meaningful contribution to the overall supply of outdoor recreational opportunities in the South Coast Planning Area.

Current and potential users of the disposed lands will not have the opportunity to recreate on the disposed parcels, and displacement to other areas offering similar types of opportunities is expected, which may increase recreational use and/or conflicts on those parcels.

**Conclusion:** The Preferred Alternative provides a substantial benefit to the recreating public through the increased development of recreational opportunities and the services provided by this alternative. The loss of land base from disposal actions is small, and involves lands generally offering little recreational potential. Increases in public use from 37,000 to 157,000 VUD are attributable to urban expansion, local population growth, acquisition of access, development of facilities, and the provision of visitor services. The cumulative impact of this alternative to meeting recreational supply and demand in the South Coast Planning Area is positive and significant.

### **Impacts to Mineral Development**

Impacts to mineral development could result from restrictions placed on development activities and from the disposal of lands with mineral potential, since their subsequent land-use development could interfere with the development of mineral resources.

The Steele Peak Area of Critical Environmental Concern (ACEC) as well as the Santa Margarita River Reserve ACEC (a total of 2,800 acres) would be withdrawn from mineral development. In addition, five other ACECs with a total of 9,419 acres would be closed to material sales.

Oil and gas leasing stipulations under this alternative would increase development costs for new leases in some instances. Development of known reserves would not be precluded, although drilling of exploratory wells may be hampered due to application of No Surface Occupancy Stipulations.

The disposal of surface lands under this alternative would affect acreage of moderate and high

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potential mineral resources as shown in Table 4-6.

**Table 4-6. Mineral Potential of Surface Lands Available for Disposal**

Resource	Total Acres on BLM Surface	Acres Disposed	Percentage Reduction
Gold	24,490	12,957	52.9%
Gemstone and Dimension stone	11,931	7,785	65.3%
Metallic and non-metallic	30,982	27,137	87.6%
High Potential Sand and Gravel	8,852	2,682	30.3%
Moderate Potential Sand and Gravel	71,183	47,656	66.9%

Impacts from land tenure adjustments will vary, depending on the mineral potential of lands acquired and the conditions under which the mineral resources are protected (i.e. recovery of fair market value, reservation, or exchange of mineral rights). Lands acquired for the protection of threatened or endangered species will not likely be available for discretionary mineral actions. The mining of locatable minerals under 43 CFR 3809 would be restricted to protect sensitive species.

Conclusion: Overall, the withdrawal of some lands to mineral entry, closure of lands to mineral material sales, and land disposal actions would result in a significant negative impact to mineral development within the planning area. However, localized impacts would be vary due to the fact that the planning area includes several different markets. Oil and gas leasing stipulations would increase development costs for new leases and complicate exploratory efforts.

### Impacts to Paleontologic Resources

The acquisition of an additional 1,000 acres in the Badlands area of Riverside County will supplement public ownership of a significant paleontological resource.

Negative impacts to paleontological resources in Los Angeles County would primarily result from disposal of lands to the private sector and the subsequent development of these lands. At projected growth rates, Los Angeles County is expected to allow more concentrated housing in outlying areas. In Los Angeles County some of the disposal parcels have a high potential for significant fossil bearing deposits. Reasonably foreseeable development for these lands would be for low density residential use (i.e. one residential unit per 40 acres). As a result, the potential impacts to fossil-bearing deposits would occur from grading of house sites, associated landscaped areas, and access roads. Subsequent to disposal, the responsibility for enforcing the California Environmental Quality Act in terms of mitigation of this non-renewable resource will lie with the respective counties. It is estimated that disposal and subsequent grading of these lands would potentially have a low to moderate negative impact on paleontological resources.

Sand and gravel quarry activities are expected to occur on 200 to 600 acres of split-estate lands in the Agua Dulce area of Los Angeles County. This could have a negative impact on paleontological resources. Testing and evaluation of the sites prior to mining, with appropriate mitigation measures

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taken, would alleviate any negative impacts.

In the next ten years, oil and gas development on BLM lands in Los Angeles County is expected to cause an additional 100 acres of surface disturbance. Negative impacts to paleontological resources from this activity would be minimal to moderate, since grading for the drill pads, and access roads is normally not extensive.

OHV use would impact paleontologic resources in the Badlands area and the Poppet Flat area of Riverside County as well as those resources in Los Angeles County. These impacts could result from direct crushing of fossil deposits and accelerated soil erosion which could expose fossils to accidental damage. Restriction of OHV use to existing routes of travel in these areas, however, will keep impacts from OHV use to a minimum. As residential development increases in the adjacent Moreno Valley, Beaumont, and other surrounding communities, there will be increased pressure on the Badlands for OHV and other recreational uses.

Conclusion: In Riverside County, the acquisition of an additional 1,000 acres in the Badlands will supplement public ownership of a significant paleontological resource. Negative impacts from OHV use will increase as population and concurrent demand for recreation use grows. Restriction and enforcement of OHV use to existing routes of travel, however, would minimize these impacts. Los to moderate negative impacts to fossil-bearing deposits will result in Los Angeles County as a consequence of land disposal, transfer, mining, or recreational activities.

### **Impacts to Kuchamaa (Native American Religious Values)**

Under this alternative, Kuchamaa and Little Tecate Peak would be retained in federal ownership and protected by the management prescriptions either specified in this RMP or developed in a site-specific ACEC plan. The ACEC would be a right-of-way avoidance area and lands within the ACEC would be acquired for the protection and enhancement of the viewshed. As a consequence, positive impacts would include Native American access to these mountains for religious purposes and reversal of the trend of impacts to the natural state of Kuchamaa caused by the presence of a communication site on Kuchamaa and residential development in the viewshed.

The vegetation management actions (prescribed burning) anticipated to occur under this alternative are not expected to negatively affect Kuchamaa. Management prescriptions developed for the proposed ACEC would minimize impacts from recreation use.

Conclusion: The management prescriptions developed for this proposed ACEC would protect the Native American religious values and the natural state of Little Tecate Peak and Kuchamaa, a significant positive impact.

### **Impacts to Watershed (Beauty Mountain Management Area)**

The designation, within the eastern part of the Beauty Mountain WSA, of a 5,800-acre Critical Soil and Watershed ACEC would provide for special management of the sensitive soil and water resources there, and would have a positive impact on these resources. However, approximately 150 acres (3%) of the sensitive watershed area would be degraded by tungsten mining and related activities.

Conclusion: Soil erosion, stream bank deterioration, and downstream siltation would increase and affect the lower reaches of the watershed west and south of the Pawnee Mine site. The management of the ACEC would maximize soil erosion control and rehabilitation measures to mitigate impacts.

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Depending on the magnitude of these mining activities, however, their impact on soil and watershed resources may represent a significant negative cumulative impact, since many watershed areas within the South Coast Planning Area have been, or are likely to be, affected by private land development.



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# Chapter 5 - Consultation and Coordination

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## Overview of the Process

The Council on Environmental Quality regulations (40 CFR 1501.7) and BLM's planning regulations (43 CFR 1610.4-1) require an early and open process (scoping) for determining the planning issues. A resource management plan is a comprehensive document, which to a practical extent addresses all relevant activities and resources within the study area. However, only for identified critical issues are alternatives developed for thorough analysis in the environmental impact statement.

## Public Scoping

A Notice of Intent to Prepare the Resource Management Plan (RMP) was published in the Federal Register on April 14, 1989. The Notice of Intent to Prepare the RMP announced the schedule of public scoping meetings and invited public participation. In addition, an announcement of the meetings was made in a letter sent to the mailing list of over 1300 persons and organizations.

Four public scoping meetings were held in May and another in June, 1989, for identifying public concerns in the issue identification process. A total of 58 concerns were identified at the public meetings, 11 relating to sensitive species protection or open space, and 11 relating to land tenure adjustment. A common thread in many of the expressed concerns was for recreation and public access to the public lands within the planning area. A total of 23 expressed concerns were placed into this category. As a result of this and other public input received, the issue of recreation and public access was identified one issue to be addressed in the planning effort. The remaining 13 concerns related to a number of other diverse subjects which are addressed in the planning effort, but which could not be categorized as falling into one of the five issue categories or consolidated as a major concern to be addressed as a planning issue.

## Development of Planning Criteria

A Notice of Availability of proposed planning criteria was published in the Federal Register on October 17, 1989. Planning criteria are the framework of laws, regulations, policies and guidance within which a resource management plan must be developed. The planning criteria were distributed for a 30-day period of public review, and approved in February of 1990.

## Future Public Participation

Upon distribution of the Draft Resource Management Plan and Environmental Impact Statement (RMP/EIS), public meetings will be held and written comments will be accepted during the 90-day review period. The public meetings will be held primarily to receive comments and also to provide explanation of the RMP alternatives.

Following review of the Draft RMP/EIS, the comments will be considered in preparation of a Proposed RMP/Final EIS which will be prepared and released for a 30 day protest period. The Proposed RMP will also be sent to the Governor of California for a 60-day review of consistency with State or local plans, policies and programs. The Approved RMP/Record of Decision will be prepared after any protests or inconsistencies have been resolved.

## **Distribution of the Draft RMP/EIS**

Copies of the EIS will be furnished to numerous public libraries throughout the planning area for public review and reference. Copies will also be distributed to those expressing an interest in the planning process. Other individuals and groups will receive a copy of the Draft RMP/EIS as a result of mailing lists or separate requests. In addition, the following agencies and organizations have been requested to review the document.

### **Federal Agencies**

Bureau of Mines  
Washington, D.C. and Spokane WA

Minerals Management Service  
Washington, D.C.

Bureau of Indian Affairs  
Riverside, CA

Bureau of Reclamation  
Denver, CO

Fish and Wildlife Service  
Washington, D.C., Ventura, CA and Laguna Niguel, CA

U.S. Geological Survey  
Reston, VA

National Park Service  
Washington, D.C. and Santa Monica, CA

Forest Service  
Washington, D.C., San Bernardino National Forest Service, Cleveland National Forest, Angeles National Forest and Pacific Southwest Forest and Range Experiment Station, Riverside Fire Lab

Soil Conservation Service  
Escondido, CA

U.S. Air Force  
Washington, D.C., Norton Air Force Base and March Air Force Base

U.S. Army Corps of Engineers  
San Francisco, CA and Los Angeles, CA

U.S. Marine Corps  
Camp Pendleton Marine Corps Base  
El Toro Marine Corps Air Station

U.S. Navy  
Miramar Naval Air Station

Department of Energy  
Washington, D.C.

Environmental Protection Agency  
Washington, D.C and San Fransisco, CA

Federal Energy Regulatory Commission  
Washington, D.C.

U.S.Border Patrol  
San Ysidro, CA

International Boundary and Water Commission  
San Ysidro

## **California State Agencies**

California Office of Planning and Research (State Clearinghouse)  
Air Resources Board  
Anza-Borrego Desert State Park  
California State Polytechnic, Pomona  
California State University, Fullerton  
Department of Transportation  
Department of Fish and Game  
Department of Forestry  
Department of Parks and Recreation  
Department of Water Resources  
Mining and Geology Board  
Native American Heritage Commission  
Regional Water Quality Control Boards (Los Angeles, San Diego and Santa Ana)  
Santa Monica Mountains Conservancy  
State Energy Commission  
State Historic Preservation Officer  
State Lands Commission

## **BLM, Cailifornia Desert District Advisory Council**

Sharon Apflebaum, (Public at Large), Palm Springs  
James Bagley, (Public at Large), Twentynine Palms  
Chuck Bell, (Public-at-Large), Lucerne Valley  
Dana Bell, (Recreation), Long Beach  
William Claypool III, (Public at Large), Needles  
Mary DeDecker, (Renewable Resources), Independence  
Robert Filler, (Nonrenewble Resources), Yuma, AZ  
Dave Fisher, (Renewable Resoureces), Barstow

Mary Ann Fisher, (Public-at-Large), North Hollywood  
Susan Hickman, (Recreation), Yermo  
Eldon Hughes, (Environmental Protection), Whittier  
Patricia Larson, (Elected Official), Indio  
Richard Milanovich, (Public-at-Large), Palm Springs  
Dr. Kenneth Norris, (Wildlife), Santa Cruz  
Fred Owings, (Transportation & Rights-of-Way), Los Angeles

## Local Government

City of Canyon Lake  
City of Escondido  
City of Hemet  
City of Highland  
City of Lake Elsinore  
City of Oceanside  
City of Poway  
City of Redlands  
City of Riverside  
City of San Diego  
City of Santa Clarita  
Los Angeles County Board of Supervisors  
Orange County Board of Supervisors  
Riverside County Board of Supervisors  
San Bernardino County Board of Supervisors  
San Diego County Board of Supervisors  
Los Angeles City Department of Water and Power  
Los Angeles County Department of Parks and Recreation  
Los Angeles County Department of Regional Planning  
Orange County Department of Planning  
Riverside County Flood Control District  
Riverside County Parks Department  
Riverside County Planning Department  
San Bernardino County Land Management Department  
San Bernardino County Office of Planning  
San Diego Association of Governments  
San Diego County Air Pollution Control District  
San Diego County Department of Planning and Land Use  
San Diego County, Local Agency Formation Commission  
San Diego County Parks Department  
San Diego County Public Works Department  
South Coast Air Quality Management District  
Southern California Association of Governments  
Southern California Metropolitan Water District

## Indian Tribes and Councils

Agua Caliente Tribe  
Barona Indian Mission  
Cahuilla Band of Mission Indians  
Campon Band of Mission Indians  
Cuyapaipe Indian Reservation

Inaja and Cosmit Reservation  
Jamul Indian Village  
La Jolla Indian Reservation  
La Posta Band of Mission Indians  
Los Coyotes Band of Mission Indians  
Mesa Grande Band of Mission Indians  
Morongo Reservation  
Pala Indian Reservation  
Pauma Band of Mission Indians  
Pechanga Band of Mission Indians  
Ramona Indian Reservation  
Rincon Reservation  
San Pasqual Indian Reservation  
Santa Rosa Band of Mission Indians  
Sycuan Band of Mission Indians  
Viejas Tribal Council

## Organizations

American Youth Hostels, San Diego Council  
Autontics Gem and Mineral Club  
Boy Scouts of America, High Adventure Committee  
Boys Club of San Gabriel Valley  
California All Terrain Vehicle Association  
California Association 4 Wheel Drive Clubs  
California Farm Bureau Federation  
California Federation of Mineralogical Societies  
California Indian Legal Service  
California Institute of Public Affairs  
California Native Plant Society  
California Off-Road Vehicle Association  
California Rifle and Pistol Association  
California Turtle and Tortoise Club  
California Wilderness Coalition  
Canyon Lake Property Owners Association  
Capistrano Valley Rock and Mineral Club  
Cattlemen At-Large Comittee  
Council of Conservation Clubs  
Del Norte Gem and Mineral Society  
Delvers Gem and Mineral Society  
Desert Tortoise Council  
Fourwheelers of Orange County  
Friends of Wildlife  
Gem Cutters Guild  
Hemet High School Conservation Club  
High Desert Cattleman's Association  
Independent Oil Producers  
Islanders Gem and Mineral Society  
Izaak Walton League of America, Inc.  
League of Women Voters  
Los Angeles Lapidary Society  
Los Angeles Museum of Natural History

Mountain Defense League  
National Public Land Advisory Council  
Pacific Coast Archeological Society  
Palmdale Gem and Mineral Club  
Palos Verdes Audubon Society  
Portland Cement Association  
Public Resources Association, Inc.  
Quail Unlimited  
Rancho Santa Ana Botanic Gardens  
San Bernardino County Museum  
San Bernardino Valley Audubon Society  
San Diego Archeological Society  
San Diego Convention and Visitors Bureau  
San Diego County Fish and Wildlife Association  
San Diego Gem and Mineral Society  
San Diego Natural History Museum  
San Diego Off-Road Coalition  
San Fernando Valley Audubon Society  
Santa Monica Bay Audubon Society  
Santa Susanna Mountain Park Association  
Sierra Club, Forest and Wilderness Committee  
Sierra Club, San Geronio Chapter  
Southern Council of Conservation Clubs  
Southwestern Herpetologists  
The Desert Protective Council  
The Nature Conservancy  
United Mining Councils of America, Inc.  
Western Mining Council  
Western States Petroleum Association  
Wilderness Association of San Diego

## **Congressional Representatives**

### **U.S. Senate**

Honorable Alan Cranston  
Honorable John Seymour

### **U.S. House of Representatives**

Honorable Glenn Anderson  
Honorable Jim Bates  
Honorable Anthony Beilenson  
Honorable Howard Berman  
Honorable George Brown, Jr.  
Honorable Christopher Cox  
Honorable William Dannemeyer  
Honorable Julian Dixon  
Honorable Robert Dornan  
Honorable David Drier  
Honorable Mervyn Dymally  
Honorable Elton Gallegly

Honorable Augustus Hawkins  
Honorable Duncan Hunter  
Honorable Richard Lehman  
Honorable Mel Levine  
Honorable Jerry Lewis  
Honorable Bill Lowery  
Honorable Matthew Martinez  
Honorable Al McCandless  
Honorable Carlos Moorhead  
Honorable Ron Packard  
Honorable Dana Rohrabacher  
Honorable Edward Roybal  
Honorable William Thomas  
Honorable Esteban Torres  
Honorable Henry Waxman

## **California State Legislature**

### **State Senate**

Honorable Ruben Ayala  
Honorable Marian Bergeson  
Honorable Robert Beverly  
Honorable William Campbell  
Honorable William Craven  
Honorable Ed Davis  
Honorable Wadie Deddeh  
Honorable Ralph Dills  
Honorable Bill Greene  
Honorable Cecil Greene  
Honorable Gary Hart  
Honorable Robert Presley  
Honorable Alan Robbins  
Honorable David Roberti  
Honorable Herschel Rosenthal  
Honorable Edward Royce  
Honorable Newton Russell  
Honorable John Seymour  
Honorable Larry Stirling  
Honorable Art Torres  
Honorable Diane Watson

### **State Assembly**

Honorable Doris Allen  
Honorable Charles Bader  
Honorable Carol Bentley  
Honorable Dennis Brown  
Honorable Charles Calderon  
Honorable Peter Chacon  
Honorable Steve Clute  
Honorable Gerald Eaves

Honorable Dave Elder  
Honorable Bob Epple  
Honorable Gerald Felando  
Honorable Gil Ferguson  
Honorable Richard Floyd  
Honorable Robert Frazee  
Honorable Terry Friedman  
Honorable Nolan Frizzelle  
Honorable Tom Hayden  
Honorable Frank Hill  
Honorable Teresa Hughes  
Honorable Tricia Hunter  
Honorable Ross Johnson  
Honorable Richard Katz  
Honorable David Kelley  
Honorable Lucy Killea  
Honorable Bill Lancaster  
Honorable William Leonard  
Honorable Burt Margolin  
Honorable Sunny Mojonnier  
Honorable Gloria Molina  
Honorable Gwen Moore  
Honorable Willard Murray  
Honorable Steve Peace  
Honorable Richard Polanco  
Honorable Curt Pringle  
Honorable Michael Roos  
Honorable Sally Tanner  
Honorable Curtis Tucker  
Honorable Maxine Waters  
Honorable Cathie Wright

## **Libraries**

### **Los Angeles County**

Los Angeles County Public Library  
    Headquarters Office, Downey  
    North County Regional Office, Valencia  
    West County Regional Office, Carson  
    South County Regional Office, Norwalk  
    Center County Regional Office, Montebello  
    East County Regional Office, West Covina  
Alhambra Public Library  
Arcadia Public Library  
Azusa Public Library  
Beverly Hills Public Library  
Burbank Public Library  
Covina Public Library  
Downey City Library  
El Segundo Public Library  
Glendale Public Library  
Glendora Public Library



Ingelwood Public Library  
Long Beach Public Library  
Los Angeles Public Library  
Monrovia Public Library  
Palmdale City Library  
Redondo Beach Public Library  
Santa Fe Springs City Library  
Sierra Madre Public Library  
Signal Hill Public Library  
Vernon Public Library

### **Orange County**

Orange County Public Library  
    Garden Grove Regional Branch  
    Irvine Heritage Park Regional Branch  
    San Juan Capistrano Regional Branch  
Anaheim Public Library  
Huntington Beach Public Library  
Santa Ana Public Library  
Yorba Linda Public Library

### **Riverside County**

Riverside County Public Library  
    Indio Branch  
    Moreno Valley Branch  
    Palm Desert Branch  
    Sun City Branch  
    Temecula Branch  
Beaumont District Library  
Elsinore Public Library  
Hemet Public Library  
Palm Springs Public Library  
Riverside Public Library  
San Jacinto Public Library

### **San Bernardino County**

San Bernardino County Public Library  
    Main Library, San Bernardino  
    Crestline Branch  
    East Baseline Branch  
    Fontana Branch  
    Rancho Cucamonga Branch  
    Rialto Branch  
    Victorville Branch  
    Yucaipa Branch  
Colton Public Library  
San Bernardino Public Library  
A. K. Smiley Public Library, Redlands

## San Diego County

San Diego County Public Library  
    El Cajon Regional Center  
    La Mesa Regional Center  
    Vista Regional Center  
    San Diego Public Library  
Escondido Public Library  
San Diego Public Library  
Chula Vista Public Library  
Ramona Public Library

# Preparers

## Introduction

The South Coast Resource Management Plan/Environmental Impact Statement (RMP/EIS) was prepared by specialists from the Palm Springs-South Coast Resource Area Office. Assistance and review was provided by the California Desert District Office and California State Office. Development of this RMP/EIS began in 1989.

## Principal Preparers

**Duane A. Winters**, Team Leader, Project Coordinator. 14 years experience in natural resources management, including 12 years with BLM. M. S. Forest Hydrology, University of Missouri, Columbia.

**Russell L. Kaldenberg**, Area Manager. Sixteen years U. S. government, state and local government experience. M. A. Anthropology, San Diego State College. Provided management direction.

**Michael J. Blymyer**, Wildlife Biologist. 17 years U. S. government and state government experience. M. S. Wildlife Sciences, Virginia Polytechnic and State University. Responsible for Wildlife Sections.

**Roland C. DeGouvenain**, Botanist (Range Conservationist). Two years U. S. government experience. B. S. Conservation of Natural Resources, University of California Berkeley and M. S. Forest Resources/Ecology, University of Washington. Responsible for Vegetation and Grazing Sections.

**David H. Eslinger**, Outdoor Recreation Planner. Seventeen years U. S. government, state, and local government experience. B. A. Biology and M. A. Environmental Administration, University of California, Riverside. Responsible for recreation and wild and scenic river sections.

**Michael H. Mitchell**, Archaeologist. Nine years U. S. government and private sector experience. M. A. Anthropology, California State University, Long Beach. Responsible for cultural, Native American, and paleontological sections.

**Ronald S. Salz**, Geographic Information Systems (GIS) Coordinator; Cooperative Education Graduate Student-Regional Planning. Four years U. S. Government experience. B. S. Conservation and Resource Studies and B. A. English, University of California, Berkeley. Responsible for GIS, data base design and maintenance.

**Frederick P. Schuster**, Geologist. Ten years U. S. government experience. B. S. Geology, University of Alabama. Responsible for minerals sections.

**William M. Selman**, Realty Specialist. Eleven years U. S. government experience. B. S. Sociology, University of Utah. Responsible for lands and realty sections.

## Other Preparers

**Lela M. Beckwith**, Clerk Typist. Twenty-five years U. S. government, state, local and private sector experience. Murray State JUCO and Haskell Indian JUCO. Provided clerical and administrative support.

**Jim Carroll**, Cartographer. Eleven years BLM experience and twenty-three years with U. S. Air Force, Defense Mapping Agency. Prepared maps and aided in preparation for printing.

**Bruce Delgado**, Biologist. B. S. Wildlife Management, Humboldt State University. Conducted vegetation surveys.

**Paul Kip Otis Diehl**, Geographic Information Systems (GIS) Assistant. Ten years U. S. government experience. Provided lands and cartographic assistance.

**Hermenia Harburda**, Clerk Typist. Provided lands and cartographic assistance.

**Kenneth Holden**, Geologist. Twenty-four years U. S. Government experience. M. S. Geology, San Jose State University. Responsible for development of oil and gas production scenarios.

**Robin Kobaly Knehr**, Botanist. Ten years BLM experience. M. A. Biology, University of California, Riverside. Conducted vegetation inventories and provided editorial assistance.

**Sarah McNaul**, Volunteer. Conducted vegetation surveys.

**Mark Milliken**, Geologist. Sixteen years U. S. government and private sector experience. M. S. Geology. Responsible for the evaluation of oil and gas potential.

**Steven Livingston Nagle**, Urban Interface Specialist. Eleven years U. S. government, state and local government experience. M. A. Political Science, University of Missouri, Columbia. Provided assistance in preparation of open space sections.

**Robert O'Brien**, Landscape Architect. Ten years BLM experience. B. A. Landscape Architecture, California State Polytechnic University, Pomona. Conducted visual and open space resource analyses.

**Brian Scott**, Fire Prevention Officer. Ten years BLM experience. Provided lands and cartographic assistance.

**Faye J. Winters**, Wildlife Biologist. Twelve years BLM experience. B. A. Biology, William Woods College. Conducted wildlife inventories and provided editorial assistance.

# GLOSSARY

## (Including Acronyms and Abbreviations)

**ACEC.** Area of Critical Environmental Concern. An area within the public lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.

**ACTIVITY PLAN.** A site specific plan for the management of one or more resources, e.g. allotment management plan or habitat management plan. Activity plans provide the additional detail necessary to implement decisions made in the Resource Management Plan.

**ALLOTMENT.** An area of land where one or more operators graze their livestock. It generally consists of BLM public lands but may include parcels of private, other federal and/or state-owned lands. The number of livestock and period of use are stipulated for each allotment. An allotment may consist of several pastures or be only one pasture.

**AMP.** Allotment Management Plan. A concisely written program of livestock grazing management, including supportive measures if required, designed to attain specific management goals in a grazing allotment. It is prepared with consultation, cooperation, and coordination with the permittee(s), lessee(s), or other affected parties.

**AUM.** Animal Unit Month. The amount of forage necessary for the complete sustenance of one cow, or its equivalent (one horse or five sheep, all over six months old) for one month; also, a unit of measurement of grazing privilege that represents the privilege of grazing one animal for a period of one month.

**ARCHAEOLOGICAL RESOURCES.** Sites, areas, structures, objects, or other evidence of prehistoric or historic human activities.

**ARCHAEOLOGICAL SITE.** Geographic locale containing structures, artifacts, material remains, and/or other evidence(s) of past human activity.

**BIOLOGICAL ASSESSMENT.** A procedural step in the interagency consultation process under Section 7 of the Endangered Species Act where the BLM submits a written summary of potential project impacts to threatened or endangered species to the USFWS for their evaluation.

**BMP.** Best Management Practice. A practice, or a combination of practices, determined by a state or a designated planning agency to be the most effective, practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.

**BIOMASS.** The sum total of living plants above and below ground expressed in pounds per acre.

**BROWSE.** The tender shoots, twigs, and leaves of trees and shrubs often used as food by deer, livestock and other animals; or to feed on or eat browse.

**CANDIDATE SPECIES.** Candidate species are any species not yet officially listed, but which are undergoing a status review or are proposed for listing according to Federal Register notices published

by the Secretary of the Interior or the Secretary of Commerce.

**CLASSIFICATION.** A formalized action taking appropriate steps pertaining to the disposition of public lands subject to the requirements of the applicable statutes. Lands are classified as to multiple-use management or disposal. Classifications can segregate (i.e. not keep open) the affected lands from settlement, location, sale, selection, entry, lease, or other forms of disposal under the public land laws, including the mining and mineral leasing laws and this segregative effect of each classification is governed by applicable laws and regulations.

**CLIMAX PLANT COMMUNITY.** The final vegetative community that emerges after a series of successive vegetational stages. It represents the highest ecological development of a plant community capable of perpetuation under the prevailing climate and soil conditions.

**CRITICAL HABITAT.** Any habitat, which if lost, would appreciably decrease the likelihood of the survival and recovery of a threatened or endangered species, or a distinct segment of its population. Critical habitat may represent any portion of the present habitat of a listed species and may include additional areas for reasonable population expansion. Critical habitat must be officially designated as such by the Fish and Wildlife Service or the National Marine Fisheries Services.

**CULTURAL RESOURCE.** The fragile and nonrenewable remains of human activity, occupation, or endeavor reflected in districts, sites, structure, buildings, objectives artifacts, ruins, works of art, architecture, and natural features that were of importance in human events. These resources consist of (1) physical remains, (2) areas where significant human events occurred even though evidence of the event no longer remains, and (3) the environment immediately surrounding the resource.

**CUMULATIVE IMPACT.** The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

**DISPOSAL.** Transfer of ownership of a tract of public land from the United States to another party.

**DISPOSAL CRITERIA.** Under the authority of Section 203 (a) of the federal Land Policy and Management Act (FLPMA), certain public lands may be sold if it is determined through land use planning that such lands meet the following disposal criteria:

- (1) such tract because of its location or other characteristics is difficult and uneconomic to manage as part of the public lands, and is not suitable for management by another federal department or agency; or
- (2) such tract was acquired for a specific purpose and the tract is no longer required for that or any other federal purpose; or
- (3) disposal of such tract will serve important public objectives, including but not limited to, expansion of communities and economic development, which cannot be achieved prudently or feasibly on land other than public land and which outweigh other public objectives and values including but not limited to recreation and scenic values, which would best be served by maintaining such tract in Federal ownership.

**EARLY SERAL.** One of the stages of plant succession. Also see SERAL STAGE. As it pertains to range management, an early seral stage is usually the result of prescribed burning to convert shrub-dominated communities into grass-dominated communities.

**ENDANGERED SPECIES.** Any species formally recognized by the U. S. Fish and Wildlife Service as in danger of extinction throughout all or a significant portion of its range.

**FEDERAL LANDS.** As used in this document, lands owned by the United States, including mineral estates underlying private surface, without reference to how the lands were acquired or what federal agency administers them.

**FEDERAL MINERAL ESTATE.** See SPLIT-ESTATE LANDS.

**FIRE FUEL.** The living and dead vegetative material that can be consumed by fire.

**FIRE MANAGEMENT PLAN.** A source document containing fire history, ecological impacts, and proposed fire actions for manageable units of public lands.

**FIRE MANAGEMENT.** The use of full suppression, limited suppression, and prescribed fire to achieve desired management objectives.

**FLPMA.** Federal Land Policy and Management Act of 1976: Public Law 94-579, which gives the BLM legal authority to establish public land policy, to establish guidelines for administering such policy and to provide for the management, protection, development, and enhancement of public land.

**FORAGE.** All browse and herbaceous foods that are available to grazing animals.

**FULL SUPPRESSION.** Taking aggressive action on all fires on or threatening the public lands with sufficient forces to contain the fire during the early burning period.

**GRAZING PREFERENCE.** The total number of AUM of livestock grazing on public lands apportioned and attached to base property owned or controlled by a permittee or lessee.

**GRAZING LEASE.** A document authorizing use of the public land for the purpose of grazing livestock.

**GROUNDWATER.** Water within the earth that supplies wells and springs.

**HABITAT.** A specific set of physical conditions that surround a single species, a group of species, or a large community. In wildlife management, the major components of habitat are considered to be food, water, cover, and living space.

**HAZARDOUS WASTES.** Those materials defined in Section 101 (14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 and listed in 40 CFR 261.

**HISTORIC.** Refers to period wherein non-native cultural activities took place, based primarily upon European roots, having no origin in traditional native American culture(s).

**HYDROCARBONS.** Organic chemical compounds of hydrogen and carbon atoms that form the basis of all petroleum products, including oil and gas.

**INHOLDING.** A parcel of non-public land surrounded by public land.

**INTERDISCIPLINARY.** Characterized by interactive participation or cooperation of two or more disciplines or fields of study.

**LEASABLE MINERALS.** Those minerals or materials that can be leased from the federal government. Includes oil and gas, coal, phosphate, sodium, potash, and oil shale.

**LEASE (MINERAL).** A contract between an owner of mineral rights and another, granting the latter the right to search for and produce gas, hydrocarbons, or other mineral substances upon payment

of an agreed-upon rental, and royalties based on production.

**LIMITED SUPPRESSION.** A deviation from normal fire suppression that is based on a fire land use decision or is practiced where controlling fire is extremely difficult or where the values-at-risk do not warrant the expense associated with normal suppression procedures.

**LOCATABLE MINERALS.** Minerals or materials subject to disposal and development through the Mining Law of 1872, (as amended). Generally includes metallic minerals such as gold and silver and other materials not subject to lease or sale (some bentonites, limestone, talc, some zeolites, etc.).

**MANAGEMENT AREA.** A discrete portion of the total planning area that has common features, problems, and/or management needs, that lends itself to specific management decisions.

**MINERAL ESTATE.** See FEDERAL MINERAL ESTATE.

**MODERN URBAN.** One of the six classes of the recreation opportunity spectrum. In modern urban areas, opportunities to experience recreation in affiliation with individuals and groups are prevalent, as is the convenience of recreation sites and opportunities. Opportunities for wildland challenges, risk taking, and testing of outdoor skills are unimportant. Opportunities for competitive spectator sports are common, as are opportunities to use parks and open spaces highly influenced by people.

**MONITORING.** Specific studies which evaluate the effectiveness of actions taken toward achieving management objectives.

**MULTIPLE USE.** The management of the public land and its various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific, and historical values, and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the combination of uses that will give the greatest economic return or the greatest unit output. Multiple use management by the BLM is in accordance with Section 102 (a) (7) of the Federal Land Policy and Management Act.

**NDDDB.** Natural Diversity Data Base. A program in the Department of Fish and Game, the NDDDB inventories the locations of the state's rarest species and natural communities. Its goal is to help conserve California's biotic diversity by providing government agencies and the private sector with information to assist in land-use decisions and resource management.

**NRHP.** National Register of Historic Places. A register of districts, sites, buildings, structures, and objects, significant in American history, architecture, archaeology, and culture, established by the Historic Preservation act of 1966 and maintained by the Secretary of the Interior.

**OFF-HIGHWAY VEHICLE (OHV) DESIGNATION.** See VEHICLE ROUTE DESIGNATION.

**OHV.** Off-Highway-Vehicle. Generally, any motorized vehicle designed for cross-country travel over any type of natural terrain. A off-highway-vehicle is defined in California Vehicle Code Sections 38006 and 38012 and generally includes dirt and dual purpose motorcycles, dune buggies, jeeps, 4-wheel drive vehicles, snowmobiles, and all-terrain-vehicles (ATVs). OHV and ORV (off-road vehicle) are considered synonymous and refer to any motorized vehicle used for travel in areas normally



considered inaccessible to conventional highway vehicles. Go-carts, quarter midgets, dragsters, moto-cross motorcycles, bicycles, horses, and motorhomes are not considered OHVs.

**ONA.** Outstanding Natural Area. Area of outstanding scenic splendor or natural wonder that merits special attention and care in management to ensure its preservation in a natural condition. A type of Area of Critical Environmental Concern.

**PALEONTOLOGY.** The geologic science dealing with the plant and animal life past geological periods as known from fossil remains.

**POPULATION.** All the individuals belonging to a single plant or animal species occupying a particular area of space.

**PREHISTORIC.** Refers to period wherein Native American cultural activities took place which were not yet influenced by contact with historic non-native culture(s).

**PRESCRIBED BURNING.** The application of fire to wildland fuels under such conditions of weather, fuels, and topography that specific objectives are accomplished safely.

**PRIMITIVE.** One of the six classes of the recreation opportunity spectrum. Primitive areas offer recreation opportunities for isolation from the sights and sounds of human activities, where a visitor can feel a part of the natural environment, experience a high degree of challenge and risk, and use outdoor skills.

**PUBLIC LAND.** As used in this document, these are lands where both the surface and mineral estates are federally owned and administered by the BLM. Also see FEDERAL LANDS and SPLIT-ESTATE LANDS.

**RANGE IMPROVEMENT.** Any activity or program on or relating to rangelands which is designed to improve production of forage, change vegetation composition, control patterns of use, provide water, stabilize soil and water conditions, and provide habitat for livestock, wild free-roaming horses and burros, and wildlife. The term includes but is not limited to structures, treatment projects, and use of mechanical means to accomplish the desired result.

**RAPTOR.** Birds of prey with sharp talons and strongly curved beaks; e.g., hawks, owls, eagles, and falcons.

**RECREATION AND PUBLIC PURPOSES.** R&PP refers to both the Recreation and Public Purposes Act (43 USC 869 (a)) and the uses to be made of public land transferred under the act. The objective of the R&PP Act is to meet the needs of state and local government agencies and nonprofit organizations by leasing or conveying public land required for recreation and public purposes uses. Examples of uses made of R&PP lands are parks, schools, religious facilities, and camps for youth groups.

**RECREATION OPPORTUNITY SPECTRUM.** A continuum used to characterize recreation opportunities in terms of setting, activity, and experience opportunities. Six classes are included: primitive, semiprimitive nonmotorized, semiprimitive motorized, roaded natural, rural, and modern urban.

**RESOURCE AREA.** A management unit of a BLM district. In this document, the Palm Springs South-Coast Resource Area is a management unit of the California Desert District.

**RIGHT-OF-WAY GRANT.** A right attached to the land for use by another party (i.e., utility lines, road, etc.).

**RIPARIAN.** Situated on or pertaining to the bank of a river, stream, or other body of water. Normally used to refer to the plants of all types that grow rooted in the watertable of streams, ponds, and springs.

**RNA.** Research Natural Area. An area that is established and maintained for the primary purpose of research and education because the land has one or more of the following characteristics: a typical representation of a common plant or animal association; an unusual plant or animal association; a threatened or endangered plant or animal species; a typical representation of common geologic, soil, or water features; or outstanding or unusual geologic, soil, or water features.

**ROADED NATURAL.** One of the six classes of the recreation opportunity spectrum. Roaded natural areas offer about equal recreation opportunities for affiliation with other user groups or isolation from sights and sounds of human activities. Such areas provide the opportunity for visitors to have a high degree of interaction with the natural environment. Challenge and risk opportunities are not very important except in specific challenging activities. The practice of outdoor skills may be important. Opportunities for both motorized and nonmotorized recreation are present.

**RURAL.** One of the six classes of the recreation opportunity spectrum. In rural areas, opportunities to experience recreation in affiliation with individuals and groups are prevalent, as is the convenience of recreation sites. These factors generally are more important than the natural setting. Opportunities for wildland challenges, risk taking, and testing of outdoor skills are unimportant except in activities involving challenge and risk.

**SALABLE MINERALS.** Minerals that may be sold under the Material Sale Act of 1947, as amended. Included are common varieties of sand, stone, gravel, and clay.

**SCOPING PROCESS.** An early and public process for determining the nature, significance, and range of issues to be addressed related to a proposed action.

**SEASON OF USE.** The part of the year in which livestock are authorized to graze in a given area.

**"SECTION 15" GRAZING LEASE.** A document authorizing use of public lands for livestock grazing outside grazing districts. The term refers to Section 15 of the Taylor Grazing Act.

**SEMIPRIMITIVE MOTORIZED.** One of the six classes of the recreation opportunity spectrum. Semiprimitive motorized areas offer some opportunities for isolation from the sights and sounds of human activities, but this is not as important as opportunities for primitive recreation. Use of these areas involves the opportunity for visitors to have a high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills. Such an area provides an explicit opportunity to use motorized equipment while in the area.

**SEMIPRIMITIVE NONMOTORIZED.** One of the six classes of the recreation opportunity spectrum. Semiprimitive nonmotorized areas offer some opportunities for isolation from the sights and sounds of human activities, but this is not as important as opportunities for primitive recreation. Use of these areas involves the opportunity for visitors to have a high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills.

**SENSITIVE SPECIES.** Species that are not yet listed as endangered or threatened, but that are undergoing a status review. This may include animals whose populations are consistently and widely dispersed or whose ranges are restricted to a few localities, so that any major habitat change could lead to extinction. A species that is particularly sensitive to some external disturbance factors.

**SERAL STAGE.** A step in the practically continuous replacement of one plant community by another (succession) as an ecological site passes from a pioneer stage through intermediate to the climax stage of a vegetation type. Recognizable stages, or seres, occur in the development of a climax

vegetation as it arises, grows, matures, and dies. These stages of progression from colonization of bare ground to formation of a stabilized habitat are called early seral, mid-seral, late seral, and potential natural community (climax).

**SIGNIFICANCE.** A high degree of importance as indicated by either quantitative measurements or qualitative judgments. Significance may be determined by evaluating characteristics pertaining to location extent, consequences, and duration.

**SPECIAL RECREATION MANAGEMENT AREA.** An area where special management or intensive recreation management is needed. Recreation activity plans are required, and greater managerial investment in facilities or supervision can be anticipated.

**SPLIT-ESTATE LANDS.** A given area where the surface and mineral estates are in different ownerships. In this document split-estate refers to areas where the surface is owned by private or state or local government, and the minerals are federally owned.

**SUSTAINED YIELD.** The achievement and maintenance in perpetuity of a high level annual or regular periodic output of the various renewable resources of the public land consistent with multiple use. This term is most commonly associated with forest management and the provisions of an undiminished or "even flow" average annual production of wood fiber over decades. It is also applicable to the management of all renewable resources including forage, wildlife, water, recreation, or any value that can be managed for renewal and sustained productivity. It is dependent on the application of multiple use management in a way that assumes the maintenance of the land's productivity.

**THREATENED SPECIES.** Any species formally recognized by the U. S. Fish and Wildlife Service as likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

**TREND.** The direction of change in range condition over a period of time, expressed as upward, downward, or static. The factors that influence trend are changes in plant composition, abundance of young plants, plant residues, plant vigor, and the condition of the soil surface.

**208 WATER PLAN.** A water quality management plan developed by an agency of each state in California, the Department of Environmental Quality. Called "208 from the section number of the Federal Water Pollution Control Act of 1972 and 1977 (also called the Clean Water Act). Section 208 of that act specifies how a continuing process of water quality management is to be used to meet the goals of the law and how boundaries of area wide regions are to be determined. It establishes procedures to be used by each state in designating an agency to develop the plan and identifies issues to be addressed in the plan.

**UNCLASSIFIED RIPARIAN FOREST.** Mapped riparian areas that were not identified as one of the six riparian vegetation types used in this planning effort.

**UTILIZATION.** The portion of the current year's production that is consumed or destroyed by grazing animals. The term may refer either to a single species or to the vegetation as a whole.

**VEGETATION TYPE.** A grouping of similar vegetation based on structure, a product of the complex of climatic factors effective in a region.

**VEHICLE ROUTE DESIGNATION.** Executive Order 11644 requires that all public land be designated for appropriate levels of OHV use in one of three possible categories: Open, Limited, or Closed. These categories are defined as follows:

Open: Means an area where all types of vehicle use is permitted at all times, anywhere in the

area subject to the operating regulations and vehicle standards set forth in Subparts 8341 and 8342 of 43 CFR.

**Limited:** Means an area restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type, but can generally be accompanied within the following types of categories: Numbers of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use only; use on existing roads and trails; use on designated roads and trails; and other restrictions.

**Closed:** Means an area where off-highway vehicle use is prohibited. Use of off-highway vehicles in closed areas may be allowed for certain reasons if specifically approved.

Exclusions (from Executive Order 11644 as amended by Executive Order 11989) are any military, fire, emergency or law enforcement vehicles while being used for emergency purposes, any vehicle whose use is expressly authorized or otherwise officially approved, vehicles in official use and any combat support vehicle in time of national defense emergencies.

**VIEWSHED.** The landscape that can be directly seen under favorable atmospheric conditions from a viewpoint or along a transportation corridor.

**VRM.** Visual Resource Management. The planning, designing, and implementation of management objectives for maintaining scenic value and visual quality on public lands.

**VUD. VISITOR USE DAY.** An aggregation of 12 visitor hours. A visitor hour is the presence of one more persons on land and water for outdoor recreation for periods totaling 60 minutes; for example, on person for one hour, two persons for one-half hour each, and so on.

**WATERSHED.** A total area of land above a given point on a waterway that contributes runoff water to the flow at that point.

**WETLAND.** Lands where at least periodic inundation or saturation with water (either from the surface or subsurface) is the dominant factor determining the natural soil development and/or the types of plant and animal communities living there. These include the entire zones associated with streams, lakes, ponds, springs, canals, and seeps.

**WITHDRAWAL.** A formalized action restricting specified land from operation or disposal under specified laws, either mineral laws or land disposal laws, or both. Can also be used to transfer jurisdiction of land to another federal agency.

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# Appendix A

## Public Lands Surface Ownership<sup>1</sup>

Table A-1. BLM Public Land Parcels within the South Coast Planning Area.

### San Diego County Management Area

Parcel No.	Acres	Legal Description			
216-251	80.00	T. 8 S.	R. 5 W.	Sec. 25	E1/2NW1/4
216-361	772.96	T. 8 S.	R. 5 W.	Sec. 36	All; T.8S. R.4W. Sec. 31 Lot 4, SE1/4SW1/4, SW1/4SE1/4
217-261	1120.00	T. 8 S.	R. 4 W.	Sec. 26	S1/2S1/2, Sec. 27 S1/2N1/2, N1/2S1/2, S1/2SE1/4, Sec. 34 NE1/4NE1/4; Sec. 35 N1/2, N1/2S1/2, SE1/4SE1/4
228-031	42.64	T. 9 S.	R. 3 W.	Sec. 3	Lot 4
228-101	40.00	T. 9 S.	R. 3 W.	Sec. 10	SW1/4SE1/4
228-151	40.00	T. 9 S.	R. 3 W.	Sec. 15	NW1/4NW1/4
229-041	160.00	T. 9 S.	R. 2 W.	Sec. 4	SW1/4NE1/4, SE1/4NW1/4, N1/2SW1/4
231-021	200.00	T. 9 S.	R. 1 E.	Sec. 2	W1/2NW1/4, N1/2SW1/4, SE1/4SW1/4
231-111	240.00	T. 9 S.	R. 1 E.	Sec. 11	NE1/4, SEC 12, W1/2NW1/4
232-211	196.22	T. 9 S.	R. 2 E.	Sec. 2 <sup>1</sup>	Lot 6, S1/2 of Lot 7, SW1/4 of Lots 8, 9 and 10; Sec. 22, Lot 12
232-212	39.82	T. 9 S.	R. 2 E.	Sec. 21	Lot 13
232-281	41.31	T. 9 S.	R. 2 E.	Sec. 28	Lot 2
236-221	1.12	T.10 S.	R. 4 W.	Sec. 22	Lot 4
239-051	1.71	T.10 S.	R. 1 W.	Sec. 5	Lot 1
241-011	2.72	T.10 S.	R. 2 E.	Sec. 1	Lot 1
241-012	600.00	T.10 S.	R. 2 E.	Sec. 1	SW1/4, W1/2SE1/4, SE1/4SE1/4, Sec. 12 N1/2
244-061	0.02	T.11 S.	R. 4 W.	Sec. 6	Lot 1
244-081	1.32	T.11 S.	R. 4 W.	Sec. 8	Lot 9
245-091	78.97	T.11 S.	R. 3 W.	Sec. 9	Lots 9 and 16
246-221	40.00	T.11 S.	R. 2 W.	Sec. 22	NE1/4SE1/4
246-251	53.56	T.11 S.	R. 2 W.	Sec. 25	Lots 1 through 10, 15 and 16
247-011	4923.72	T.11 S.	R. 1 W.	Sec. 1	Lots 1 through 4, S1/2N1/2, S1/2; Sec. 11, Lots 1 through 3, 7 through 10, 13 through 16; Sec. 12, All; Sec. 13, W1/2NE1/4, NW1/4SE1/4; Sec. 14, Lots 1 through 5, and 8; Sec. 15, Lot 4, T.11S., R.1E., Sec. 4, Lots 2 through 5, and 9, S1/2NW1/4; Sec. 5, All; Sec. 6, All; Sec. 7, Lots 1-3, E1/2NW1/4, NE1/4, W1/2SE1/4; Sec. 8, Lots 1-4, W1/2NE1/4, N1/2NW1/4; Sec. 9, Lot 1; Sec. 17, Lots 1-3, NW1/4NW1/4; Sec. 18, Lot 4, SE1/4SW1/4, NE1/4, N1/2SE1/4, SW1/4SE1/4
247-331	40.00	T.11 S.	R. 1 W.	Sec. 33	SE1/4SW1/4
247-332	80.00	T.11 S.	R. 1 W.	Sec. 33	NE1/4SE1/4, Sec. 34 NW1/4SW1/4
249-171	2.18	T.11 S.	R. 2 E.	Sec. 17	Lot 1
249-172	16.30	T.11 S.	R. 2 E.	Sec. 17	Lot 2
249-321	40.00	T.11 S.	R. 2 E.	Sec. 32	SE1/4SE1/4
253-331	75.00	T.12 S.	R. 3 W.	Sec. 33	W1/2SW1/4SE1/4, SE1/4SW1/4SE1/4, E1/2NE1/4SW1/4SE1/4, SE1/4SE1/4
254-311	397.12	T.12 S.	R. 2 W.	Sec. 31	Lot 8, T.12S.3W., Sec. 1, Lots 1, 2, 3 and 4, S1/2N1/2, NW1/4SE1/4
255-011	0.29	T.12 S.	R. 1 W.	Sec. 1	Lot 1
255-051	38.96	T.12 S.	R. 1 W.	Sec. 5	Lot 1
255-081	39.32	T.12 S.	R. 1 W.	Sec. 8	Lot 9

<sup>1</sup>. Split estate lands with federal mineral ownership are not included.

Table A-1. BLM Public Land Parcels within the South Coast Planning Area (cont.)

San Diego County Management Area

Parcel No.	Acres	Legal Description			
255-151	81.46	T.12 S.	R. 1 W.	Sec. 15	Lots 6 and 11
255-231	1696.65	T.12 S.	R. 1 W.	Sec. 23	E1/2SE1/4; Sec. 24 SW1/4; Sec. 25, Lots 1 through 6, and 8, S1/2NE1/4, SE1/4; T.12S. R.1E. Sec. 29 NW1/4NW1/4, S1/2NW1/4, SW1/4; Sec. 30, Lots 2 through 4, SE1/4NE1/4, E1/2SW1/4, SE1/4; Sec. 31, Lot 1, NE1/4NW1/4, N1/2NE1/4; Sec. 32, N1/2NW1/4
255-271	40.00	T.12 S.	R. 1 W.	Sec. 27	NE1/4NE1/4
256-311	282.15	T.12 S.	R. 1 E.	Sec. 31	SE1/4SE1/4, Sec. 32 SW1/4SW1/4, T.13S. R.1E. Sec. 6 Lots 1, 2, 3 and 4, SW1/4NE1/4
257-041	40.00	T.12 S.	R. 2 E.	Sec. 4	NW1/4SE1/4
257-091	40.00	T.12 S.	R. 2 E.	Sec. 9	SW1/4NE1/4
260-031	0.21	T.13 S.	R. 3 W.	Sec. 3	Lot 9
260-041	0.02	T.13 S.	R. 3 W.	Sec. 4	Lot 5
260-231	40.00	T.13 S.	R. 3 W.	Sec. 23	SW1/4SW1/4NE1/4, W1/2NW1/4SE1/4, SE1/4NW1/4SE1/4
261-061	80.00	T.13 S.	R. 2 W.	Sec. 6	SE1/4NW1/4, NE1/4SW1/4
262-211	79.93	T.13 S.	R. 1 W.	Sec. 21	Lots 1 through 8, 11 through 14, 19 through 22
262-212	68.30	T.13 S.	R. 1 W.	Sec. 21	Lots 9, 10, 16, 17, 24 through 32
262-221	35.00	T.13 S.	R. 1 W.	Sec. 22	W1/2W1/2NW1/4SE1/4, W1/2NW1/4SW1/4SE1/4, S1/2SW1/4SE1/4
263-351	84.32	T.13 S.	R. 1 E.	Sec. 35	Lots 3, 5 and 6, SE1/4NW1/4
263-361	58.95	T.13 S.	R. 1 E.	Sec. 36	Lots 2 and 7
264-081	30.00	T.13 S.	R. 2 E.	Sec. 8	N1/2NW1/4NW1/4, N1/2S1/2SW1/4NW1/4
264-082	141.37	T.13 S.	R. 2 E.	Sec. 8	Lots 1, 2 and 3, SE1/4NE1/4, SE1/4NW1/4, W1/2NW1/4SE1/4
264-151	120.00	T.13 S.	R. 2 E.	Sec. 15	W1/2SW1/4, NE1/4SW1/4
264-191	1460.15	T.13 S.	R. 2 E.	Sec. 19	Lots 6, 7 and 8, E1/2NE1/4, Sec. 20, Lots 1 through 5, S1/2NE1/4, S1/2NW1/4, NW1/4NW1/4, E1/2SE1/4; Sec. 21, N1/2NE1/4, SW1/4NE1/4, SW1/4SW1/4, E1/2SW1/4, W1/2SE1/4, SE1/4SE1/4; Sec. 28, Lots 2, 3 and 4, NE1/4, E1/2NW1/4, NW1/4NW1/4, NW1/4SE1/4, E1/2SE1/4; Sec. 29, Lot 1, N1/2NE1/4; Sec. 33, Lots 1 and 2
269-081	40.00	T.14 S.	R. 1 E.	Sec. 8	NE1/4SW1/4
269-151	.20	T.14 S.	R. 1 E.	Sec. 15	Lot 1
269-251	2832.22	T.14 S.	R. 1 E.	Sec. 25	Lots 5 through 11, SW1/4NE1/4, W1/2SE1/4, S1/2SW1/4, Sec. 33 SE1/4NE1/4, E1/2SE1/4; Sec. 34, Lots 2 and 4 through 13, S1/2NE1/4, SE1/4NW1/4; Sec. 35, Lots 1 through 15; Sec. 36, Lots 1 through 8; T.15S., R.1E. Sec. 1, Lot 1, N1/2, N1/2SE1/4, SE1/4SE1/4 NE1/4SW1/4; Sec. 2, Lot 1, N1/2NE1/4, SE1/4NE1/4; Sec. 3, Lots 2 through 4, SW1/4NE1/4, W1/2NW1/4, SE1/4NW1/4, N1/2SW1/4; Sec. 4, Lot 1, NE1/4, N1/2SE1/4
270-051	170.92	T.14 S.	R. 2 E.	Sec. 5	Lots 2 through 6, S1/2NW1/4
270-061	40.00	T.14 S.	R. 2 E.	Sec. 6	NW1/4SE1/4
270-081	160.00	T.14 S.	R. 2 E.	Sec. 8	SW1/4
270-191	10.00	T.14 S.	R. 2 E.	Sec. 19	S1/2S1/2NE1/4NE1/4
270-192	160.00	T.14 S.	R. 2 E.	Sec. 19	E1/2SE1/4, SW1/4SE1/4, SE1/4SW1/4
283-171	40.00	T.16 S.	R. 2 E.	Sec. 17	SE1/4SW1/4
283-351	160.80	T.16 S.	R. 2 E.	Sec. 35	S1/2SE1/4, T17S2E Sec. 2, Lots 1 and 2
290-081	80.00	T.17 S.	R. 1 E.	Sec. 8	N1/2NE1/4
290-201	760.00	T.17 S.	R. 1 E.	Sec. 20	NE1/4, N1/2SE1/4, SE1/4SE1/4, Sec. 21 N1/2, N1/2S1/2
290-291	80.00	T.17 S.	R. 1 E.	Sec. 29	W1/2SE1/4

Table A-1. BLM Public Land Parcels within the South Coast Planning Area (cont.)

San Diego County Management Area

Parcel No.	Acres	Legal Description			
291-091	200.00	T.17 S.	R. 2 E.	Sec. 9	SE1/4SW1/4, S1/2SE1/4, Sec. 10 SW1/4SW1/4, Sec. 15 NW1/4NW1/4
292-191	80.00	T.17 S.	R. 3 E.	Sec. 19	N1/2NE1/4
292-251	2687.64	T.17 S.	R. 3 E.	Sec. 25	N1/2, E1/2SE1/4, N1/2NW1/4SE1/4, W1/2SW1/4, NE1/4SW1/4, Sec. 26 N1/2, SE1/4, E1/2SW1/4, NW1/4SW1/4; Sec. 27 N1/2, SW1/4, N1/2SE1/4; Sec. 28, SE1/4NE1/4, E1/2SE1/4; Sec. 35 N1/2NE1/4, SW1/4NE1/4, N1/2NW1/4; Sec. 36 NW1/4NE1/4, N1/2NW1/4 SE1/4NW1/4, N1/2NE1/4SW1/4, SE1/4; T.17S., R.4E., Sec. 30, Lot 1 through 3; Sec. 31, Lots 3 and 4, NE1/4SW1/4; T.18S., R.3E., Sec. 1, NE1/4NE1/4
292-281	600.00	T.17 S.	R. 3 E.	Sec. 28	NW1/4, W1/2SW1/4, Sec. 29 NE1/4, E1/2SE1/4, Sec. 32 E1/2NE1/4, NE1/4SE1/4
292-301	160.00	T.17 S.	R. 3 E.	Sec. 30	SE1/4NW1/4, E1/2SW1/4, Sec. 31 NE1/4NW1/4
292-311	668.23	T.17 S.	R. 3 E.	Sec. 31	Lots 2 and 3, SE1/4, T.18S. R.3E. Sec. 6 Lots 1, 2 and 4, S1/2NE1/4, E1/2SE1/4, Sec. 5 S1/2NW1/4, SW1/4NE1/4, T.18S., R.2E., Sec. 1, SE1/4NE1/4
292-331	1770.34	T.17 S.	R. 3 E.	Sec. 33	E1/2SE1/4, E1/2SW1/4SE1/4, Sec. 34 S1/2, SE1/4NE1/4, T.18S. R.3E. Sec. 3 Lots 1 through 4, N1/2NE1/4, SE1/4NW1/4, E1/2SW1/4, SW1/4SW1/4, W1/2SE1/4; Sec. 4, Lots 1, 5, 6 and 7; Sec. 9, NE1/4NE1/4, S1/2NE1/4, SE1/4NW1/4, N1/2SW1/4, N1/2SE1/4; Sec. 10, W1/2NE1/4, NW1/4, N1/2SW1/4, SE1/4SW1/4, W1/2SE1/4
293-301	160.00	T.17 S.	R. 4 E.	Sec. 30	E1/2E1/2
293-321	40.00	T.17 S.	R. 4 E.	Sec. 32	NW1/4NW1/4
293-322	160.00	T.17 S.	R. 4 E.	Sec. 32	N1/2NE1/4, SE1/4NE1/4, NE1/4SE1/4
293-323	80.00	T.17 S.	R. 4 E.	Sec. 32	SE1/4SW1/4, SW1/4SE1/4
293-331	7281.44	T.17 S.	R. 4 E.	Sec. 33	NE1/4NE1/4SE1/4, S1/2N1/2SE1/4; Sec. 34, Lots 1 through 10, NE1/4, NE1/4NW1/4, N1/2SE1/4; Sec. 35, Lots 1, 2, 5 through 8, NE1/4, NW1/4, NW1/4SW1/4, Sec. 36, Lots 2, 3 and 4, NW1/4NE1/4, S1/2NW1/4, W1/2SE1/4, S1/2SW1/4; T.17S. R.5E. Sec. 31 Lots 6, 7, 11 and 12; T.18S. R.4E. Sec. 1 Lots 1, 2, and 3 SE1/4NE1/4, SE1/4NW1/4, SW1/4SW1/4, SE1/4; Sec. 2 Lots 1 through 4, S1/2N1/2, S1/2; Sec. 3 Lot 1; Sec. 10 Lot 8 SE1/4SE1/4; Sec. 11, All; Sec. 12, All; Sec. 13, All; Sec. 14, All; Sec. 15, Lots 1, 2, 4, 6, 13, and 14, E1/2NE1/4, NE1/4SE1/4; Sec. 22, Lot 1; Sec. 23, NE1/4NE1/4; Sec. 24, N1/2NW1/4; T.18S. R.5E. Sec. 5 NW1/4SW1/4; Sec. 6 Lot 1, SE1/4; Sec. 7, Lot 1 of the NW1/4, S1/2 of Lot 2 of the NW1/4, Lot 1 of the SW1/4, Lot 2 of the SW1/4, E1/2; Sec. 17 SW1/4NW1/4; Sec. 18, Lots 1 and 2 of the NW1/4; Lots 1 and 2 of the SW1/4, NE1/4, W1/2SE1/4; Sec. 19, N1/2 of Lot 1 of the NW1/4; N1/2 of Lot 2 of the NW1/4

Table A-1. BLM Public Land Parcels within the South Coast Planning Area (cont.)

San Diego County Management Area

Parcel No.	Acres	Legal Description		
294-131	866.20	T.17 S.	R. 5 E.	Sec. 13 Lots 5 and 14, NE1/4, W1/2SE1/4, SE1/4SE1/4, Sec. 24 Lots 1, 7, 10, 11 and 14, N1/2NE1/4, T.17S. R.6E. Sec. 18 W1/2NE1/4, NW1/4, E1/2SW1/4, NE1/4SE1/4
294-132	1949.32	T.17 S.	R. 5 E.	Sec. 13 Lots 8 and 9; Sec. 14, W1/2; Sec. 15 SE1/4NE1/4, S1/2SE1/4; Sec. 21 SE1/4SE1/4; Sec. 22 Lots 1 and 2, NE1/4,E1/2NW1/4, SW1/4, W1/2SE1/4; Sec. 23, Lot 1 N1/2; Sec. 24 Lots 4 and 5; Sec. 27 Lots 1, 9 and 10, W1/2W1/2; Sec. 28, E1/2NE1/4, SE1/4; Sec. 33 NE1/4NE1/4; Sec. 34 Lot 3, NW1/4NW1/4
294-151	35.00	T.17 S.	R. 5 E.	Sec. 15 N1/2SW1/4NW1/4, SE1/4SW1/4NW1/4, S1/2SW1/4SW1/4NW1/4
294-211	105.00	T.17 S.	R. 5 E.	Sec. 21 NW1/4SE1/4, NE1/4SW1/4, N1/2NW1/4SW1/4, S1/2SE1/4NW1/4SW1/42
294-241	391.32	T.17 S.	R. 5 E.	Sec. 24 Lots 24 and 25; Sec. 25, E1/2
294-291	4.93	T.17 S.	R. 5 E.	Sec. 29 Lot 37
294-292	1.35	T.17 S.	R. 5 E.	Sec. 29 Lot 41
294-293	1.20	T.17 S.	R. 5 E.	Sec. 29 Lot 1
294-341	615.34	T.17 S.	R. 5 E.	Sec. 34 Lot 7, NE1/4SE1/4; Sec. 35, Lots 2 through 4, NE1/4, S1/2NW1/4, N1/2S1/2; T.18S., R.5E.; Sec. 2, NE1/4NE1/4
295-071	280.00	T.17 S.	R. 6 E.	Sec. 7 E1/2SE1/4, SE1/4NE1/4, Sec. 8 N1/2NW1/4, SW1/4NW1/4, NW1/4SW1/4
295-311	280.00	T.17 S.	R. 6 E.	Sec. 31 NW1/4NW1/4, S1/2NW1/4, SW1/4
296-331	80.00	T.17 S.	R. 7 E.	Sec. 33 NE1/4SE1/4, Sec. 34 NW1/4SW1/4
299-011	18,771.50	T.18 S.	R. 1 E.	Sec. 1 Sec. 1 Lots 3 and 4, S1/2NW1/4, SW1/4, SW1/4SE1/4; Sec. 2 S1/2; Sec. 3 SE1/4NW1/4, NE1/4SW1/4, S1/2SW1/4, SE1/4; Sec. 9 SE1/4NE1/4, E1/2SE1/4; Sec. 10 N1/2NE1/4, W1/2, NW1/4SE1/4, S1/2SE1/4; Sec. 11 N1/2, NE1/4SW1/4, S1/2SW1/4, SE1/4; Sec. 12 All; Sec. 13 All; Sec. 14 All; Sec. 15 All; Sec. 17 S1/2; Sec. 18 SE1/4; Sec. 20 NE1/4, E1/2NW1/4, NW1/4NW1/4, N1/2SW1/4NW1/4; Sec. 21 All; Sec. 22 All; Sec. 23 All; Sec. 24 All; Sec. 25 All; Sec. 25 All; Sec. 26 All; Sec. 27 All; Sec. 28 N1/2, N1/2SW1/4, SE1/4; Sec. 33 N1/2NE1/4; Sec. 34 Lots 1 through 4, N1/2, N1/2SW1/4; Sec. 35 Lots 1 through 4, N1/2; T.18S. R.2E., Sec. 7 Lots 5 and 6, S1/2SW1/4NW1/4, SE1/4; Sec. 8 S1/2NE1/4, SW1/4, W1/2SE1/4; Sec. 9 NW1/4NE1/4, E1/2NW1/4, SW1/4NW1/4; Sec. 17 All; Sec. 18 All; Sec. 19 All; Sec. 20 All; Sec. 21 Lots 1, 2 and 3, SW1/4NE1/4, W1/2, NW1/4SE1/4; Sec. 22 N1/2NW1/4NW1/4, MS3272, Unsurveyed lode claims; Sec. 27 N1/2NW1/4; Sec. 28 N1/2NE1/4, NE1/4NW1/4, W1/2W1/2; Sec. 29 All; Sec. 30 All; Sec. 31 Lots 1, 6 through 9, NE1/4NW1/4, N1/2NE1/4; Sec. 32 Lot 5, N1/2NW1/4
299-181	40.00	T.18 S.	R. 1 E.	Sec. 18 SE1/4NW1/4
300-021	440.00	T.18 S.	R. 2 E.	Sec. 2 S1/2NW1/4, N1/2SW1/4, SE1/4SW1/4, SW1/4SE1/4, Sec. 3 S1/2NE1/4, Sec. 11 W1/2NE1/4, NE1/4NW1/4
300-121	396.77	T.18 S.	R. 2 E.	Sec. 12 N1/2, T18SR3E Sec. 7 Lot 1, NE1/4NW1/4

**Table A-1. BLM Public Land Parcels within the South Coast Planning Area (cont.)**

**San Diego County Management Area**

<b>Parcel No.</b>	<b>Acres</b>	<b>Legal Description</b>		
300-131	280.00	T.18 S.	R. 2 E.	Sec. 13 S1/2SW1/4, Sec. 24 E1/2NW1/4, SW1/4NW1/4, Sec. 23 S1/2NE1/4
300-151	240.00	T.18 S.	R. 2 E.	Sec. 15 E1/2SW1/4, S1/2SE1/4, Sec. 22 N1/2NE1/4
300-361	40.71	T.18 S.	R. 2 E.	Sec. 36 Lots 3 through 6
300-211	71.50	T.18 S.	R. 2 E.	Sec. 21 Lot 1, Sec. 22, N1/2NW1/4NW1/4, Unsurveyed lode claims
301-111	360.00	T.18 S.	R. 3 E.	Sec. 11 NE1/4SE1/4, Sec. 12 W1/2NE1/4, SE1/4NE1/4, SE1/4NW1/4, N1/2SW1/4, SE1/4SW1/4, NW1/4SE1/4
301-151	200.00	T.18 S.	R. 3 E.	Sec. 15 SW1/4, Sec. 16 SE1/4SE1/4
301-171	200.00	T.18 S.	R. 3 E.	Sec. 17 S1/2SE1/4, Sec. 20 E1/2NW1/4, NW1/4NE1/4
301-211	485.57	T.18 S.	R. 3 E.	Sec. 21 SW1/4, Sec. 28, Lots 5 through 8, NW1/4, S1/2NE1/4
301-221	841.26	T.18 S.	R. 3 E.	Sec. 22 NE1/4NE1/4, SE1/4SW1/4, S1/2SE1/4, Sec. 23 W1/2, S1/2SE1/4, Sec. 24 N1/2NW1/4SW1/4SW1/4, S1/2SW1/4SW1/4SW1/4; Sec. 26 Lot 1, N1/2N1/2; Sec. 27, N1/2NE1/4
302-061	80.05	T.18 S.	R. 4 E.	Sec. 6 Lots 10, 11 and 12
302-091	159.75	T.18 S.	R. 4 E.	Sec. 9 Lot 6, Sec. 10 Lots 2, 3, 6, and 7, W1/2NW1/4
302-151	141.27	T.18 S.	R. 4 E.	Sec. 15 SW1/4SW1/4, Sec. 22 Lots 6, 7 and 12
302-211	446.84	T.18 S.	R. 4 E.	Sec. 21 S1/2S1/2; Sec. 28 Lot 1, 2, 3 and 4, N1/2N1/2; Sec. 29 NE1/4NE1/4
302-241	155.87	T.18 S.	R. 4 E.	Sec. 24 Lots 11 and 13, SW1/4SW1/4, SE1/4SE1/4; Sec. 25 Lots 1, 2, 3 and 4, T.18S. R.5E. Sec. 30 Lot 1
303-061	40.00	T.18 S.	R. 5 E.	Sec. 6 NW1/4NE1/4
303-121	3350.56	T.18 S.	R. 5 E.	Sec. 12 SW1/4SE1/4, Sec. 13, All; Sec. 23 Lots 2 through 10; Sec. 24 Lots 1 through 12; T.18S. R.6E., Sec. 5 E1/2SW1/4; Sec. 7 Lot 6 E1/2NE1/4, SE1/4; Sec. 8 W1/2; Sec. 17 W1/2; Sec. 18 All; Sec. 19 Lots 1 through 11 S1/2NE1/4
303-171	200.00	T.18 S.	R. 5 E.	Sec. 17 S1/2NE1/4, N1/2SE1/4, SW1/4SE1/4
303-191	354.99	T.18 S.	R. 5 E.	Sec. 19 Lot 6, Sec. 20 Lots 1 through 6, SE1/4NE1/4
303-211	80.00	T.18 S.	R. 5 E.	Sec. 21 N1/2NE1/4
303-221	48.11	T.18 S.	R. 5 E.	Sec. 22 Lot 7
304-061	75.22	T.18 S.	R. 6 E.	Sec. 6 Lots 4 and 5
305-021	219.85	T.18 S.	R. 7 E.	Sec. 2 Lot 3, N1/2NW1/4SW1/4NE1/4, SW1/4SW1/4NE1/4, S1/2SE1/4SW1/4NE1/4, SE1/4NW1/4, N1/2SW1/4, SE1/4SW1/4
305-031	80.00	T.18 S.	R. 7 E.	Sec. 3 SW1/4SE1/4, Sec. 10 NW1/4NE1/4
305-091	40.00	T.18 S.	R. 7 E.	Sec. 9 NW1/4NE1/4
305-151	46.19	T.18 S.	R. 7 E.	Sec. 15 Lot 7

**Management Area Totals**

<b>TOTAL PARCELS</b>	<b>TOTAL ACRES</b>
117	64,698.51

**Table A-1. BLM Public Land Parcels within the South Coast Planning Area (cont.)**

**Riverside-San Bernardino County Management Area**

Parcel No.	Acres	Legal Description			
107-021	40.00	T. 1 S.	R. 3 W.	Sec. 2	SE1/4SE1/4
107-101	480.00	T. 1 S.	R. 3 W.	Sec. 10	NE1/4, S1/2NW1/4, SW1/4, S1/2SE1/4
107-121	240.00	T. 1 S.	R. 3 W.	Sec. 12	W1/2SW1/4, NE1/4SW1/4, N1/2SE1/4, SW1/4SE1/4
108-081	280.00	T. 1 S.	R. 2 W.	Sec. 8	S1/2NW1/4, SW1/4, NW1/4SE1/4
122-021	243.14	T. 2 S.	R. 6 W.	Sec. 2	Lots 1, 7, 8, 9 and 10, NE1/4SW1/4
122-022	40.32	T. 2 S.	R. 6 W.	Sec. 2	Lot 5
144-021	320.00	T. 3 S.	R. 2 W.	Sec. 2	SW1/4NW1/4, SW1/4, W1/2SE1/4, SE1/4SE1/4
144-041	203.18	T. 3 S.	R. 2 W.	Sec. 4	Lots 9, 10, 14, 15 and 16
144-101	488.85	T. 3 S.	R. 2 W.	Sec. 10	Lots 1 through 6 and 8, SW1/4, SW1/4SE1/4
145-241	318.99	T. 3 S.	R. 1 W.	Sec. 24	Lots 1 through 9
145-281	80.00	T. 3 S.	R. 1 W.	Sec. 28	E1/2NE1/4
145-282	80.00	T. 3 S.	R. 1 W.	Sec. 28	W1/2SE1/4
145-321	120.00	T. 3 S.	R. 1 W.	Sec. 32	S1/2SE1/4, NE1/4SE1/4
146-281	580.00	T. 3 S.	R. 1 E.	Sec. 28	NE1/4, NE1/4NW1/4, E1/2NW1/4NW1/4, S1/2NW1/4, SE1/4, N1/2SW1/4, SW1/4SW1/4
146-301	265.00	T. 3 S.	R. 1 E.	Sec. 30	E1/2SW1/4, SE1/4, SE1/4SE1/4SW1/4NE1/4, S1/2NE1/4SE1/4NE1/4, SE1/4SE1/4NE1/4, S1/2SW1/4SE1/4NE1/4, NE1/4SW1/4SE1/4NE1/4
146-321	7968.64	T. 3 S.	R. 1 E.	Sec. 32	All; T.4S., R.1W., Sec. 12; All; Sec. 24, Lots 1 through 4, and 9 through 13; T.4S., R.1E. Sec. 2, Lots 2, 3, and 4 Sec. 3, Lots 1 through 4, S1/2NW1/4, N1/2SE1/4NE1/4, SW1/4NE1/4, SW1/4, W1/2SE1/4; Sec. 4, All; Sec. 5, All; Sec. 6, Lots 1 and 2, S1/2NE1/4, NE1/4SE1/4, S1/2SE1/4; Sec. 7, All; Sec. 8, All; Sec. 9, All; Sec. 10, Lots 3 through 6; Sec. 16, NE1/4, S1/2S1/2; Sec. 17, All; Sec.18, All; Sec. 19, Lots 1, 2, and 3, NE1/4, E1/2NW1/4, NE1/4SW1/4, N1/2SE1/4; Sec. 20, N1/2NW1/4, N1/2NE1/4, SE1/4NE1/4; Sec. 21, NW1/4
146-361	240.00	T. 3 S.	R. 1 E.	Sec. 36	SW1/4, W1/2SE1/4
160-141	40.00	T. 4 S.	R. 4 W.	Sec. 14	SE1/4SE1/4
160-241	40.00	T. 4 S.	R. 4 W.	Sec. 24	SW1/4SE1/4
160-281	160.00	T. 4 S.	R. 4 W.	Sec. 28	E1/2W1/2
160-321	464.60	T. 4 S.	R. 4 W.	Sec. 32	Lots 13, 14, 16 through 21, 23, 29, 32, 33, 34, 36, 37, 39, 40, 41, 43, and 44, SE1/4NE1/4, SW1/4NW1/4
161-061	0.18	T. 4 S.	R. 3 W.	Sec. 6	Lot 3
162-221	120.00	T. 4 S.	R. 2 W.	Sec. 22	W1/2NW1/4, NW1/4/SW1/4
162-261	113.80	T. 4 S.	R. 2 W.	Sec. 26	Lot 1, SE1/4NE1/4, NE1/4SE1/4
162-301	85.78	T. 4 S.	R. 2 W.	Sec. 30	Lot 4, SE1/4SW1/4
164-021	80.00	T. 4 S.	R. 1 E.	Sec. 2	E1/2SE1/4
164-101	25.46	T. 4 S.	R. 1 E.	Sec. 10	Lot 8
164-221	890.00	T. 4 S.	R. 1 E.	Sec. 22	E1/2NE1/4, E1/2SW1/4, SE1/4, Sec. 26 N1/2, W1/2SW1/4, N1/2N1/2SE1/4, N1/2S1/2NW1/4SE1/4; Sec. 27 E1/2NE1/4, NE1/4SE1/4
164-351	40.00	T. 4 S.	R. 1 E.	Sec. 35	NE1/4NE1/4
175-081	320.00	T. 5 S.	R. 5 W.	Sec. 8	N1/2
175-101	320.00	T. 5 S.	R. 5 W.	Sec. 10	E1/2
175-241	360.00	T. 5 S.	R. 5 W.	Sec. 24	N1/2N1/2, SW1/4NE1/4, SE1/4SW1/4, E1/2SW1/4, NW1/4SE1/4
176-041	755.08	T. 5 S.	R. 4 W.	Sec. 4	Lots 2, 3, and 4, SW1/4NE1/4, SE1/4NW1/4, E1/2SW1/4, SW1/4SW1/4, Sec. 9 NE1/4, E1/2NW1/4, NW1/4NW1/4, E1/2SW1/4NW1/4, E1/2SW1/4, E1/2W1/2SW1/4



Table A-1. BLM Public Land Parcels within the South Coast Planning Area (cont.)

Riverside-San Bernardino County Management Area

Parcel No.	Acres	Legal Description			
176-141	80.00	T. 5 S.	R. 4 W.	Sec. 14	E1/2SE1/4
176-201	160.00	T. 5 S.	R. 4 W.	Sec. 20	NW1/4
176-221	19.80	T. 5 S.	R. 4 W.	Sec. 22	MS 3540
176-261	640.00	T. 5 S.	R. 4 W.	Sec. 26	All
176-281	100.00	T. 5 S.	R. 4 W.	Sec. 28	W1/2SE1/4SE1/4, S1/2NE1/4SE1/4SE1/4, Sec. 33 NE1/4NE1/4NE1/4, N1/2NW1/4NE1/4NE1/4, S1/2NE1/4NE1/4, SE1/4NE1/4
176-341	160.00	T. 5 S.	R. 4 W.	Sec. 34	SE1/4NE1/4, NE1/4SE1/4, S1/2SE1/4
177-181	157.14	T. 5 S.	R. 3 W.	Sec. 18	Lot 4, SE1/4SW1/4, S1/2SE1/4
177-301	80.00	T. 5 S.	R. 3 W.	Sec. 30	N1/2SE1/4
179-261	80.00	T. 5 S.	R. 1 W.	Sec. 26	N1/2NE1/4
180-111	545.00	T. 5 S.	R. 1 E.	Sec. 11	N1/2, NE1/4SW1/4, N1/2NW1/4SW1/4, SE1/4NW1/4SW1/4, N1/2N1/2SE1/4SW1/4, N1/2SE1/4, SE1/4SE1/4, NE1/4SW1/4SE1/4, N1/2NW1/4SW1/4SE1/4, SE1/4NW1/4SW1/4SE1/4, N1/2SE1/4SW1/4SE1/4, SE1/4SE1/4SW1/4SE1/4
180-141	1470.00	T. 5 S.	R. 1 E.	Sec. 14	SE1/4SE1/4, Sec. 22 NE1/4, N1/2S1/2, Sec. 23, All, Sec. 26 N1/2N1/2, SE1/4NE1/4, SE1/4, NE1/4SW1/4, Sec. 35, NE1/4NE1/4, E1/2NW1/4NE1/4, NE1/4SE1/4NE1/4
180-271	50.00	T. 5 S.	R. 1 E.	Sec. 27	NE1/4NW1/4, NE1/4NW1/4NW1/4
180-272	190.00	T. 5 S.	R. 1 E.	Sec. 27	W1/2SW1/4, SE1/4SW1/4, S1/2NE1/4SW1/4, NW1/4NE1/4SW1/4, Sec. 34 NW1/4NW1/4
180-281	40.00	T. 5 S.	R. 1 E.	Sec. 28	NW1/4SE1/4
180-341	340.00	T. 5 S.	R. 1 E.	Sec. 34	NE1/4NE1/4NE1/4, NW1/4NW1/4NE1/4, S1/2N1/2NE1/4, S1/2NE1/4, SE1/4, Sec. 35 SW1/4NW1/4
188-041	79.88	T. 6 S.	R. 5 W.	Sec. 4	Lots 1, 2, 3, and 4
189-101	40.00	T. 6 S.	R. 4 W.	Sec. 10	NW1/4NW1/4
189-341	0.05	T. 6 S.	R. 4 W.	Sec. 34	Lot 1
190-301	58.26	T. 6 S.	R. 3 W.	Sec. 30	Lot 1 and 2 Less MS 4703
190-302	80.00	T. 6 S.	R. 3 W.	Sec. 30	S1/2SE1/4
190-303	3.20	T. 6 S.	R. 3 W.	Sec. 30	Lot 5
190-321	200.00	T. 6 S.	R. 3 W.	Sec. 32	N1/2N1/2, SE1/4NE1/4
191-041	160.86	T. 6 S.	R. 2 W.	Sec. 4	Lot 4, S1/2NW1/4, SW1/4NE1/4
191-061	79.75	T. 6 S.	R. 2 W.	Sec. 6	Lot 1, SE1/4NE1/4
191-241	40.00	T. 6 S.	R. 2 W.	Sec. 24	NW1/4SE1/4
191-242	40.00	T. 6 S.	R. 2 W.	Sec. 24	SW1/4SW1/4
192-061	120.25	T. 6 S.	R. 1 W.	Sec. 6	Lot 7, SE1/4SW1/4, SW1/4SE1/4
192-101	160.00	T. 6 S.	R. 1 W.	Sec. 10	SW1/4NE1/4, W1/2SE1/4, SE1/4SE1/4
192-261	40.00	T. 6 S.	R. 1 W.	Sec. 26	SW1/4SW1/4
193-041	145.63	T. 6 S.	R. 1 E.	Sec. 4	Lots 3, 4 and 5
193-101	670.20	T. 6 S.	R. 1 E.	Sec. 10	E1/2W1/2, E1/2, Lots 1 through 4
193-181	360.00	T. 6 S.	R. 1 E.	Sec. 18	SE1/4NW1/4, S1/2NE1/4, E1/2SW1/4, SE1/4
193-361	56.94	T. 6 S.	R. 1 E.	Sec. 36	Lots 5, 6, and 7
205-081	40.00	T. 7 S.	R. 1 W.	Sec. 8	NW1/4NE1/4
205-082	120.00	T. 7 S.	R. 1 W.	Sec. 8	SW1/4NW1/4, W1/2SW1/4
205-121	122.79	T. 7 S.	R. 1 W.	Sec. 12	Lots 4, 5, and 6
205-321	122.30	T. 7 S.	R. 1 W.	Sec. 32	Lots 1 Through 4, SE1/4SE1/4
205-341	480.00	T. 7 S.	R. 1 W.	Sec. 34	NW1/4, SW1/4, SE1/4
206-101	360.00	T. 7 S.	R. 1 E.	Sec. 10	N1/2N1/2, SE1/4NE1/4, SE1/4
206-121	320.00	T. 7 S.	R. 1 E.	Sec. 12	W1/2
206-141	40.00	T. 7 S.	R. 1 E.	Sec. 14	NW1/4NW1/4
206-301	166.73	T. 7 S.	R. 1 E.	Sec. 30	Lots 3 and 4, E1/2SW1/4
207-121	675.82	T. 7 S.	R. 2 E.	Sec. 12	Lots 1 through 8, SW1/4NE1/4, S1/2NW1/4, N1/2SW1/4, SE1/4SW1/4, W1/2SE1/4
208-041	40.00	T. 7 S.	R. 3 E.	Sec. 4	SW1/4SE1/4

**Table A-1. BLM Public Land Parcels within the South Coast Planning Area (cont.)**

**Riverside-San Bernardino County Management Area**

<b>Parcel No.</b>	<b>Acres</b>	<b>Legal Description</b>			
208-042	240.12	T. 7 S.	R. 3 E.	Sec. 4	Lots 4 through 8, 11 and 12, NE1/4NW1/4
208-051	40.00	T. 7 S.	R. 3 E.	Sec. 5	NW1/4NE1/4
208-061	198.22	T. 7 S.	R. 3 E.	Sec. 6	Lots 5 through 8 and 17
208-131	20.00	T. 7 S.	R. 3 E.	Sec. 13	N1/2NE1/4SE1/4
208-132	120.00	T. 7 S.	R. 3 E.	Sec. 13	S1/2NE1/4SW1/4, S1/2SW1/4, S1/2SW1/4SE1/4
208-181	50.00	T. 7 S.	R. 3 E.	Sec. 18	SW1/4SE1/4, W1/2W1/2SE1/4SE1/4
208-182	10.00	T. 7 S.	R. 3 E.	Sec. 18	E1/2E1/2SE1/4SE1/4
218-231	859.81	T. 8 S.	R. 3 W.	Sec. 23	SE1/4SE1/4, Sec. 24 Lot 1, 2 and 3, S1/2SW1/4, Sec. 25 W1/2NE1/4, W1/2, SE1/4, Sec. 26, E1/2NE1/4, NE1/4SE1/4
218-261	40.00	T. 8 S.	R. 3 W.	Sec. 26	NE1/4NW1/4
218-331	320.00	T. 8 S.	R. 3 W.	Sec. 33	NW1/4NE1/4, S1/2NE1/4, S1/2NW1/4, N1/2SW1/4, NE1/4SE1/4
219-241	200.00	T. 8 S.	R. 2 W.	Sec. 24	S1/2S1/2, NE1/4SE1/4
219-291	970.94	T. 8 S.	R. 2 W.	Sec. 29	Lot 2, SW1/4SW1/4, Sec. 31 Lot 4, E1/2, SE1/4NW1/4, E1/2SW1/4, Sec. 32 NW1/4, NE1/4SW1/4, N1/2SE1/4, T.9S. R.2W., Sec. 6, Lots 2, 3, 5, and 6
220-041	286.12	T. 8 S.	R. 1 W.	Sec. 4	Lot 1,2,3,4, N1/2N1/2
220-191	360.00	T. 8 S.	R. 1 W.	Sec. 19	SE1/4NW1/4, SE1/4, E1/2SW1/4, Sec. 20 W1/2SW1/4
220-241	40.00	T. 8 S.	R. 1 W.	Sec. 24	SE1/4SE1/4
221-041	329.35	T. 8 S.	R. 1 E.	Sec. 4	Lots 1, 2, 3 and 4, S1/2NE1/4, Sec. 5 Lots 3 and 4
221-042	160.00	T. 8 S.	R. 1 E.	Sec. 4	SW1/4
221-221	407.81	T. 8 S.	R. 1 E.	Sec. 22	Lots 9 through 16, Sec. 27 N1/2NW1/4, NW1/4NE1/4
221-271	80.00	T. 8 S.	R. 1 E.	Sec. 27	NE1/4SW1/4, NW1/4SE1/4
221-301	40.00	T. 8 S.	R. 1 E.	Sec. 30	SW1/4NE1/4
221-331	40.00	T. 8 S.	R. 1 E.	Sec. 33	SW1/4NW1/4
221-332	40.00	T. 8 S.	R. 1 E.	Sec. 33	SW1/4SE1/4
221-351	39.89	T. 8 S.	R. 1 E.	Sec. 35	Lot 12

**Management Area Totals**

<b>TOTAL PARCELS</b>	<b>TOTAL ACRES</b>
99	26,642.09

**Table A-1. BLM Public Land Parcels within the South Coast Planning Area (cont.)**

**Beauty Mountain Management Area**

<b>Parcel No.</b>	<b>Acres</b>	<b>Legal Description</b>		
221-131	160.00	T. 8 S.	R. 1 E.	Sec. 13 W1/2SW1/4, SE1/4SW1/4, SW1/4SE1/4
221-231	2168.97	T. 8 S.	R. 1 E.	Sec. 23 SE1/4SE1/4, Sec. 24 Lots 5, 6, 7 and 8, Sec.25 N1/2, N1/2S1/2, Sec. 26 Lots 1, 2, 4 and 5, T.8S., R.2E., Sec. 19 Lot 4, SE1/4SW1/4, S1/2SE1/4, NE1/4SE1/4, Sec. 20, S1/2S1/2, NW1/4SW1/4, Sec. 21, S1/2SW1/4, SW1/4SE1/4, Sec. 28, N1/2NW1/4, Sec. 29, N1/2, Sec. 30, Lots 1, 2, and 3, NE1/4, E1/2NW1/4, NE1/4SW1/4
222-071	40.00	T. 8 S.	R. 2 E.	Sec. 7 SE1/4NE1/4
222-081	40.00	T. 8 S.	R. 2 E.	Sec. 8 NE1/4SW1/4
222-082	40.00	T. 8 S.	R. 2 E.	Sec. 8 SW1/4SE1/4
222-141	40.00	T. 8 S.	R. 2 E.	Sec. 14 NW1/4NW1/4
222-221	15,113.56	T. 8 S.	R. 2 E.	Sec. 22 SE1/4SE1/4, Sec. 23 S1/2S1/2, Sec. 24 S1/2S1/2, NE1/4SE1/4, Sec. 25 All, Sec. 26 E1/2NE1/4, S1/2SW1/4, Sec. 27 N1/2, SW1/4, Sec. 28 S1/2, Sec. 29 S1/2SW1/4, SW1/4SE1/4, Sec. 30 SE1/4SE1/4, Sec. 31 NE1/4NE1/4, Sec. 32 E1/2, E1/2NW1/4, NW1/4NW1/4, N1/2SW1/4, Sec. 33 NW1/4, S1/2, Sec. 34 NE1/4NE1/4, S1/2, Sec. 35 W1/2NE1/4, W1/2, SE1/4, Sec. 36 NE1/4, E1/2NW1/4, NW1/4NW1/4, S1/2, T.8S., R.3E. Sec. 19 Lots 3 and 4, E1/2SW1/4, Sec. 20 E1/2E1/2, NW1/4, NW1/4SW1/4, S1/2SW1/4, SW1/4SE1/4, Sec. 28 All, Sec. 30 All, Sec. 31 Lots 1 through 4, NE1/4, E1/2W1/2, E1/2SE1/4, Sec. 32 All, Sec. 33 All, Sec. 34 All, T.9S., R.2E. Sec. 1 Lots 1 through 12, Sec. 2 Lots 1 through 14, Sec. 3 Lots 1 through 16, Sec. 4 Lots 1 through 4, 8, 9,15, and 16, Sec. 5 Lots 1, 2, 7, 8, and 9, Sec. 9 Lot 8, Sec. 10 Lots 1 through 5, Sec. 11 Lot 4, T.9S., R.3E., Sec. 3 S1/2NW1/4, SW1/4, Sec. 4 Lots 7 through 12, S1/2NE1/4, N1/2SW1/4, Sec. 5 All, Sec. 6 Lots 1, 2, 8, and 9, SE1/4NE1/4, Sec. 9 N1/2, NW1/4, Sec. 10 N1/2NE1/4, SW1/4NE1/4, N1/2NW1/4, NW1/4SE1/4, T. 81/2S., R.3E. Sec. 31 Lots 3 through 7, Sec. 32 Lots 1 through 8, Sec. 33 Lots 1 through 8, Sec. 34 Lots 1 through 8, Sec. 35 Lots 1 through 8
223-091	38.90	T. 8 S.	R. 3 E.	Sec. 9 Lot 14
223-161	400.00	T. 8 S.	R. 3 E.	Sec. 16 E1/2NW1/4, S1/2
223-181	240.00	T. 8 S.	R. 3 E.	Sec. 18 NE1/4, E1/2SE1/4
223-182	43.36	T. 8 S.	R. 3 E.	Sec. 18 Lot 4
223-221	560.00	T. 8 S.	R. 3 E.	Sec. 22 W1/2NE1/4, NW1/4, S1/2
223-241	560.00	T. 8 S.	R. 3 E.	Sec. 24 NE1/4, W1/2NW1/4, S1/2
223-261	640.00	T. 8 S.	R. 3 E.	Sec. 26 All
223-361	640.00	T. 8 S.	R. 3 E.	Sec. 36 All
232-081	346.72	T. 9 S.	R. 2 E.	Sec. 8 Lots 2, 3, 4, 6, 7, 9, 10 and 11, Sec. 9, Lot 12
232-101	3294.46	T. 9 S.	R. 2 E.	Sec. 10 T.9S., R.2E., Sec. 10 E1/2 Lot 16, Sec. 11, Lots 1, 7, 8, 12 through 14, Sec. 12, Lots 1, 3 through 16, Sec. 13, All, Sec. 14, Lots 1 through 12, 14 through 16, Sec. 15, Lot 8, Sec. 23, Lots 1 through 3, 6, 7 and 8, Sec. 24, Lots 1, 2, 4, 6, 7 and 8, T.9S., R.3E., Sec. 6, Lot 13, Sec. 7, Lots 7 through 17, Sec. 18, Lots 5 through 8, NW1/4NE1/4

**Table A-1. BLM Public Land Parcels within the South Coast Planning Area (cont.)**

**Beauty Mountain Management Area**

<b>Parcel No.</b>	<b>Acres</b>	<b>Legal Description</b>			
232-161	40.47	T. 9 S.	R. 2 E.	Sec. 16	Lot 15
232-251	2263.44	T. 9 S.	R. 2 E.	Sec. 25	Sec. 25, Lots 1 through 8, 10 through 12, Sec. 26, Lots 9, 15 and 16, T.9S., R.3E., Sec. 19, Lots 5 through 15, Sec. 20, Lots 1 through 7, NE1/4, E1/2NW1/4, Sec. 21, Lots 1 through 4, E1/2, NW1/4, Sec. 22, W1/2W1/2
233-111	685.26	T. 9 S.	R. 3 E.	Sec. 11	Lots 3 through 10, Sec. 12, Lots 6 through 9, Sec. 13, Lots 1 and 2, Sec. 14 NE1/4
233-121	590.21	T. 9 S.	R. 3 E.	Sec. 12	Lots 1 through 5, E1/2SE1/4, Sec. 13, Lot 3 through 7, E1/2NE1/4, Sec. 24, Lot 1
233-221	560.00	T. 9 S.	R. 3 E.	Sec. 22	SE1/4SE1/4, Sec. 23 SW1/4SW1/4, Sec. 26 W1/2, SE1/4NE1/4, W1/2SE1/4, SE1/4SE1/4
241-011	40.47	T. 10 S.	R. 2 E.	Sec. 1	Lot 1

**Management Area Totals**

<b>TOTAL PARCELS</b>	<b>TOTAL ACRES</b>
23	28,508.07

Table A-1. BLM Public Land Parcels within the South Coast Planning Area (cont.)

Los Angeles-Orange County Management Area

Parcel No.	Acres	Legal Description			
002-161	80.00	T. 8 N.	R. 18 W.	Sec. 16	W1/2 NE1/4
002-361	160.00	T. 8 N.	R. 18 W.	Sec. 36	E1/2NW1/4, W1/2NE1/4
002-362	79.55	T. 8 N.	R. 18 W.	Sec. 36	Lots 1 and 2
003-311	240.12	T. 8 N.	R. 17 W.	Sec. 31	Lots 3 and 4, SE1/4SW1/4, S1/2SE1/4, NE1/4SE1/4
011-261	80.00	T. 6 N.	R. 17 W.	Sec. 26	E1/2NE1/4
012-311	376.53	T. 6 N.	R. 16 W.	Sec. 31	Lots 1, 2 and 3, NE1/4NW1/4, N1/2NE1/4, SE1/4NE1/4, N1/2SE1/4, SE1/4SE1/4
016-031	337.94	T. 5 N.	R. 17 W.	Sec. 3	Lots 1, 2, 3, and 6, E1/2NE1/4, Sec. 2 Lots 2, 3, 4, 6, 7, and 10
017-071	40.00	T. 5 N.	R. 16 W.	Sec. 7	NE1/4NW1/4
017-181	40.00	T. 5 N.	R. 16 W.	Sec. 18	SE1/4NE1/4
017-201	40.00	T. 5 N.	R. 16 W.	Sec. 20	NW1/4SW1/4
018-311	5.00	T. 5 N.	R. 15 W.	Sec. 31	N1/2SW1/4SE1/4SE1/4
019-201	40.00	T. 5 N.	R. 14 W.	Sec. 20	SW1/4SW1/4
019-241	80.00	T. 5 N.	R. 14 W.	Sec. 24	SE1/4NW1/4, SW1/4NE1/4
019-271	0.32	T. 5 N.	R. 14 W.	Sec. 27	Lot 4
019-272	0.62	T. 5 N.	R. 14 W.	Sec. 27	Lot 6
019-273	307.72	T. 5 N.	R. 14 W.	Sec. 27	Lot 5, Sec. 28 Lots 2 through 6, N1/2NW1/4, SW1/4NW1/4, N1/2SW1/4, Sec. 29 Lot 8
019-291	2.79	T. 5 N.	R. 14 W.	Sec. 29	Lot 7
019-301	38.50	T. 5 N.	R. 14 W.	Sec. 30	NE1/4SE1/4 (Excluding MS 4960)
019-331	40.00	T. 5 N.	R. 14 W.	Sec. 33	SE1/4SW1/4
019-351	70.00	T. 5 N.	R. 14 W.	Sec. 35	SE1/4SE1/4, S1/2NE1/4SE1/4, S1/2S1/2NW1/4NE1/4SE1/4, S1/2NE1/4NE1/4SE1/4, NE1/4NE1/4NE1/4SE1/4
019-361	160.00	T. 5 N.	R. 14 W.	Sec. 36	NE1/4
020-011	200.00	T. 5 N.	R. 13 W.	Sec. 1	S1/2SW1/4, NE1/4SW1/4, Sec. 12 W1/2NW1/4
020-081	40.00	T. 5 N.	R. 13 W.	Sec. 8	SW1/4NE1/4
020-121	40.00	T. 5 N.	R. 13 W.	Sec. 12	SW1/4SW1/4
020-131	90.00	T. 5 N.	R. 13 W.	Sec. 13	NW1/4SW1/4, W1/2NE1/4SW1/4, N1/2SW1/4SW1/4, SW1/4SW1/4SW1/4
020-221	70.00	T. 5 N.	R. 13 W.	Sec. 22	NE1/4NE1/4, NE1/4SE1/4NE1/4, Sec. 23 SW1/4NW1/4NW1/4, NW1/4SW1/4NW1/4
020-261	10.00	T. 5 N.	R. 13 W.	Sec. 26	NW1/4NW1/4SW1/4
020-271	24.32	T. 5 N.	R. 13 W.	Sec. 27	SE1/4NE1/4 Excluding MS 6732 (15.677 Acres)
020-301	40.00	T. 5 N.	R. 13 W.	Sec. 30	NE1/4SE1/4
022-021	1.25	T. 4 N.	R. 17 W.	Sec. 2	S1/2NE1/4SE1/4SE1/4SW1/4
022-041	52.50	T. 4 N.	R. 17 W.	Sec. 4	W1/2W1/2NE1/4SE1/4, NW1/4SE1/4, NW1/4NW1/4SE1/4SE1/4
022-051	40.13	T. 4 N.	R. 17 W.	Sec. 5	Lot 3
022-061	40.00	T. 4 N.	R. 17 W.	Sec. 6	SW1/4NE1/4
022-101	79.27	T. 4 N.	R. 17 W.	Sec. 10	SE1/4SE1/4, Sec. 11 Lot 1, Sec.14 Lot 1
024-121	80.00	T. 4 N.	R. 15 W.	Sec. 12	S1/2NW1/4
024-151	80.00	T. 4 N.	R. 15 W.	Sec. 15	NE1/4/NW1/4, NW1/4NE1/4
025-011	816.07	T. 4 N.	R. 14 W.	Sec. 1	Sec. 1 Lot 1, SE1/4NE1/4, T4NR13W Sec. 5 Lot 4, SW1/4NW1/4, W1/2SW1/4, Sec. 6 Lots 1 through 5, SE1/4NW1/4, S1/2NE1/4,E1/2SE1/4, Sec. 7 E1/2NE1/4, NE1/4SE1/4, Sec. 8 NW1/4NW1/4, N1/2NW1/4SW1/4
025-051	5.49	T. 4 N.	R. 14 W.	Sec. 5	Lot 22
025-061	67.50	T. 4 N.	R. 14 W.	Sec. 6	SE1/4NW1/4, SE1/4NE1/4NW1/4, SE1/4NE1/4NE1/4NW1/4, E1/2SW1/4NE1/4NW1/4, SE1/4NE1/4SW1/4NW1/4, SW1/4SE1/4SW1/4NW1/4, E1/2SE1/4SW1/4NW1/4

**Table A-1. BLM Public Land Parcels within the South Coast Planning Area (cont.)**

**Los Angeles-Orange County Management Area**

<b>Parcel No.</b>	<b>Acres</b>	<b>Legal Description</b>			
026-021	440.00	T. 4 N.	R. 13 W.	Sec. 2	Sec. 2 W1/2, NW1/4SE1/4, Sec.11 N1/2NW1/4
026-041	39.61	T. 4 N.	R. 13 W.	Sec. 4	Lot 1
026-042	315.63	T. 4 N.	R. 13 W.	Sec. 4	Lot 4, SW1/4NW1/4, W1/2SW1/4, Sec. 8 NE1//4NE1/4, N1/2SE1/4NE1/4, SW1/4SE1/4NE1/4, W1/2SE1/4SE1/4NE1/4, Sec. 9 W1/2NW1/4
026-071	34.87	T. 4 N.	R. 13 W.	Sec. 7	Lot 3
026-081	5.00	T. 4 N.	R. 13 W.	Sec. 8	W1/2SE1/4NE1/4SW1/4
026-141	80.05	T. 4 N.	R. 13 W.	Sec. 14	Lots 1 through 16
026-142	51.40	T. 4 N.	R. 13 W.	Sec. 14	Lots 21, 28 through 33, Lots 38, 39 and 40
032-021	168.65	T. 3 N.	R. 17 W.	Sec. 2	Lots 1 through 5, 9, 10, and 11
032-111	78.94	T. 3 N.	R. 17 W.	Sec. 11	Lots 7 and 8
032-112	30.42	T. 3 N.	R. 17 W.	Sec. 11	Lot 10
032-121	194.89	T. 3 N.	R. 17 W.	Sec. 12	Lot 2, NE1/4NW1/4, NW1/4NE1/4, S1/2NE1/4
032-122	80.00	T. 3 N.	R. 17 W.	Sec. 12	SE1/2SE1/4
033-081	17.12	T. 3 N.	R. 16 W.	Sec. 8	Lots 7 and 8
033-191	77.56	T. 3 N.	R. 16 W.	Sec. 19	Lot 1, NE1/4NW1/4
101-341	0.01	T. 1 S.	R. 9 W.	Sec. 34	Lot 6
101-342	0.17	T. 1 S.	R. 9 W.	Sec. 34	Lot 7
167-191	2.00	T. 5 S.	R. 13 W.	Sec. 19	Lot 1
186-081	1.35	T. 6 S.	R. 7 W.	Sec. 8	Lot 1

**Management Area Totals**

<b>TOTAL PARCELS</b>	<b>TOTAL ACRES</b>
57	5,613.29

**Planning Area Totals**

<b>TOTAL PARCELS</b>	<b>TOTAL ACRES</b>
296	128,461.96

# Appendix B

## Special Plant and Animal Species, and Plant Communities Considered for Inventory and Analysis

### Wildlife

A number of fish and wildlife<sup>1</sup> species would be significantly affected by implementation of one or more of the alternatives and are, therefore, analyzed in the RMP/EIS. These species are identified in the Chapter 3 narrative for each management area. Table B-1 lists all of the species considered for analysis. Many wildlife species, however, would not be significantly impacted by implementation of any of the RMP alternatives; therefore, these species, which are discussed below, are not analyzed in detail as issues in the RMP.

The most threatened wildlife habitat types within the planning area are coastal sage scrub and riparian communities. These plant communities are rapidly disappearing and are considered rare in southern California. Both of these habitat types are considered particularly important due to their association with sensitive species. The methods of inventory and analysis for these two habitats are presented below.

### Important Wildlife Habitat Types

Riparian systems throughout the planning area were mapped using baseline data from the National Wetlands Inventory Maps (published by the U.S. Fish and Wildlife Service) as a base. This data was transferred onto a computerized mapping system to overlay parcel boundaries on the riparian maps. Most of the riparian areas on BLM-administered surface lands were later verified and categorized utilizing helicopter surveys. The riparian communities present on BLM-administered lands in the planning area exist as narrow corridors of growth associated with drainages. Instead of attempting to determine the acreage of these thin ribbons of habitat, the linear mileage of these corridors was tabulated. The width of the riparian communities on BLM lands in the planning area ranges from about 30 feet to 300 feet, with the average width of these communities being about 50 ft.

A total of approximately 130 miles of riparian habitat was identified on BLM-administered lands in the planning area. Of this total, approximately 111 miles of riparian habitat occurs in segments of at least 0.5 miles in length and are considered manageable for the purposes of this management plan.

There are no planning-area wide acreage figures currently available for coastal sage scrub, outside of San Diego County. As part of this planning effort, the BLM determined the acreage of coastal sage scrub by parcel on BLM lands. The BLM-administered lands within the planning area include approximately 11,033 acres of coastal sage scrub. This includes 6,888 acres of coastal sage scrub in Riverside County, 2,690 acres in San Diego County Management Area, 1,295 acres in Los Angeles-Orange County Management Area and 160 acres in the Beauty Mountain Management Area. For the purposes of this management plan, coastal sage scrub was considered to be manageable when it occurred in blocks of 30 acres or more. Of the total coastal sage scrub within the planning area,

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<sup>1</sup>. The terms "fish and wildlife" and "fish and wildlife habitat," pertain to all game and nongame vertebrates and invertebrates including threatened, endangered, and other special status species (proposed, candidate, and sensitive species), and all habitat occupied by these species.

10,817 acres were considered to be manageable.

## **Special Status Species Considered But Not Addressed**

For the following species, public land in the planning area either provides a small portion of the total habitat, provides habitat used only on an occasional basis, or provides widely distributed habitat interspersed with private, state and other land. Therefore, this RMP will have little effect on these species.

### **Federally-Listed or Proposed Wildlife Species:**

**Aleutian Canada Goose.** Public land provides no known foraging or resting habitat for migrating geese.

**Bald Eagle.** Public land provides only limited potential as foraging habitat for eagles wintering near large impoundments such as Big Bear Lake, Lake Henshaw, Lake Perris, Lake Mathews, and Cuyamaca Reservoir.

**Brown Pelican.** The Brown Pelican does not inhabit public land within the RMP area.

**Peregrine Falcon.** Public land provides very limited foraging habitat for migrating Peregrine Falcons. There is no known occupied habitat on public lands within the RMP area.

**California Black Rail.** The California Black Rail does not inhabit public land within the RMP area.

### **Federal Candidate and State-Listed Wildlife Species:**

**San Diego Horned Lizard.** This candidate species occurs over a wide area of southern California in a variety of habitats. Known vegetation types supporting populations of this species range from low elevation grasslands and coastal sage scrub through chaparral and up into dry meadows and open Jeffrey pine communities between 4,000 to 5,500 feet (McGurty 1981). Due to its ubiquitous nature in a variety of protected habitats located on public and National Forest lands, no significant impacts to this species would occur from any of the analyzed alternatives.

**California Yellow-billed Cuckoo.** The only known potential breeding sites remaining in the RMP area are along the Santa Ana River near Riverside and the San Luis Rey River Valley near Vista; neither area contains public land.

### **Other Federal Candidate Species Considered But Not Addressed**

#### **Mammals**

San Bernardino dusky shrew  
Ornate salt marsh shrew  
California leaf-nosed bat  
Spotted bat  
Pacific western big-eared bat  
Mexican long-tongued bat  
San Bernardino flying squirrel  
Mohave ground squirrel  
Los Angeles pocket mouse  
Pacific little pocket mouse  
Tehachapi white-eared pocket mouse  
Southern marsh harvest mouse  
Southwestern otter



San Joaquin kit fox  
Southern sea otter  
Peninsular bighorn sheep

### **Birds**

Reddish egret  
White-faced ibis  
Ferruginous hawk  
Swainson's hawk  
Light-footed clapper rail  
Western snowy plover  
Mountain plover  
California least tern  
Elegant tern  
Long-billed curlew  
Spotted owl  
Southwestern willow flycatcher  
Belding's Savannah Sparrow  
Large-billed savannah sparrow  
Tricolored blackbird

### **Amphibians**

California tiger salamander  
Yellow-blotched ensatina  
Large-blotched ensatina  
Arroyo southwestern toad  
California red-legged frog  
San Felipe leopard frog

### **Reptiles**

Desert tortoise  
Blunt-nosed leopard lizard  
Southern rubber boa  
San Diego mountain king snake

### **Fishes**

Tidewater goby  
Delta smelt

### **Insects**

Santa Monica shieldback katydid  
Oblivious tiger beetle  
Greenest tiger beetle  
Mojave Desert blister beetle  
Lange's El Segundo dune weevil  
Dorothy's El Segundo dune weevil  
Dohrn's elegant eucnemid beetle  
Bumblebee (Pacific sand bear) scarab beetle  
Globose dune beetle  
Dun skipper

Salt marsh skipper  
Laguna Mountains skipper  
Wandering skipper  
San Gabriel Mountains elfin butterfly  
Hermes copper butterfly  
Thorne's hairstreak butterfly  
San Gabriel Mountains blue butterfly  
El Segundo blue butterfly  
Palos Verde blue butterfly  
Callippe silverspot butterfly  
Andrew's marble butterfly  
Henne's eucosman moth  
California diplectronan caddisfly

### Snails

Mimic tryonia (California brackish water snail)  
*Helminthoglypta traskiae coelata* (no common name)

### **Game Species**

**Small Game: Doves, Band-tailed Pigeons, and Cottontail Rabbits.** Mourning doves and cottontail rabbits inhabit public, State, and private land throughout the entire RMP area. BLM-administered lands provide a comparatively small percentage of the total habitat for these small game species. Band-tailed pigeons, on the other hand, are closely associated with oak and oak-conifer vegetation associations. Although these vegetation types do occur on BLM parcels in the planning area, these occurrences are not extensive, and are biologically insignificant compared to their occurrence on other lands, such as those administered by the USDA Forest Service. Consequently, public land is not considered crucial to maintaining their populations. Implementation of the RMP would not significantly impact these small game populations. Therefore, impacts to these populations will not be an issue directly addressed in the RMP.

Quail (including both California and Mountain Quail) will be addressed in all management areas where land consolidation is an addressed alternative.

**Table B-1a. Wildlife Species Considered for Analysis**

Common Name (Scientific Name) <sup>2</sup>	Status <sup>3</sup>	Presence on Public Land <sup>1</sup>			
		LA-O <sup>4</sup>	B-MT <sup>4</sup>	R-SB <sup>4</sup>	S-DG <sup>4</sup>
<b>Federally Listed and Proposed Species</b>					
El Segundo Blue Butterfly ( <i>Euphilotes battoides allyni</i> )	E	N	N	N	N
Palos Verdes Blue Butterfly ( <i>Glaucopteryx lygdamus palosverdesensis</i> )	E	N	N	N	N
<sup>5</sup> Unarmored three-spined stickleback ( <i>Gasterosteus aculeatus williamsoni</i> )	E (SE)	N	N	N	N
Blunt-nosed Leopard Lizard ( <i>Gambelia silus</i> )	E (SE)	N	N	N	N
Aleutian Canada Goose ( <i>Branta canadensis leucopareia</i> )	E	N	N	N	N
<sup>5</sup> California Condor ( <i>Gymnogyps californianus</i> )	E (SE)	M	N	N	N
Bald Eagle ( <i>Haliaeetus leucocephalus</i> )	E (SE)	N	N	N	N
Brown Pelican ( <i>Pelecanus occidentalis</i> )	E (SE)	N	N	N	N
Light Footed Clapper Rail ( <i>Rallus longirostris levipes</i> )	E (SE)	N	N	N	N
California Least Tern ( <i>Sterna antillarum (=albifrons) browni</i> )	E (SE)	N	N	N	N
Peregrine Falcon ( <i>Falco peregrinus</i> )	E (SE)	N	N	N	N
<sup>5</sup> Least Bell's Vireo ( <i>Vireo bellii pusillus</i> )	E (SE)	N	N	V	M
<sup>5</sup> Stephens' Kangaroo Rat ( <i>Dipodomys stephensi</i> )	E (ST)	N	N	V	M
San Joaquin Kit Fox ( <i>Vulpes macrotis mutica</i> )	E (ST)	N	N	N	N
Desert Tortoise ( <i>Xerobates agassizii</i> )	T (ST)	N	N	N	N
Southern Sea Otter ( <i>Enhydra lutris nereis</i> )	T	N	N	N	N
California Black Rail ( <i>Laterallus jamaicensis coturniculus</i> )	P (ST)	N	N	N	N
<b>Federal Candidate Species</b>					
Mimic tryonia ( <i>Tyronia imitator</i> )	C2	N	N	N	N
Snail, No Common Name ( <i>Helminthoglypta traskiae coelata</i> )	C2	N	N	N	N
Santa Monica Shieldback ( <i>Neduba logipennis</i> )	C2	N	N	N	N
Oblivious Tiger Beetle ( <i>Cicindela latesignata obliviosa</i> )	C2	N	N	N	N
Greenest Tiger Beetle ( <i>Cicindela tranquebarica viridissima</i> )	C2	N	N	N	N
Mojave Desert Blister Beetle ( <i>Lytta inseparata</i> )	C2	N	N	N	N
Lange's El Segundo Dune Weevil ( <i>Onychobaris langei</i> )	C2	N	N	N	N
Dorothy's El Segundo Dune Weevil ( <i>Trigonoscota dorothea dorothea</i> )	C2	N	N	N	N
Dohrn's Elegant Eucnemid Beetle ( <i>Paleoxenus dohrni</i> )	C2	N	N	N	N
Bumblebee Scarab Beetle ( <i>Lichnanthe ursina</i> )	C2	N	N	N	N
Globose Dune Beetle ( <i>Coelus globosus</i> )	C2	N	N	N	N
Dun Skipper ( <i>Eyphyes vestris harbisoni</i> )	C2	N	N	N	N
Salt Marsh Skipper ( <i>Panoquina errans</i> )	C2	N	N	N	N
Wandering Skipper ( <i>Pseudocopaodes eunus eunus</i> )	C2	N	N	N	N
Laguna Mountains Skipper ( <i>Pyrgus ruralis laguna</i> )	C2	N	N	N	N
San Gabriel Mountains Elfin Butterfly ( <i>Incisalia mossi hidakupa</i> )	C2	N	N	N	N
Hermes Copper Butterfly ( <i>Lycaena hermes</i> )	C2	N	N	N	N
Thorne's Hairstreak Butterfly ( <i>Mitoura thornei</i> )	C2	N	N	N	N
<sup>5</sup> Wright's Checkerspot Butterfly ( <i>Euphydryas editha quino</i> )	C2	N	N	N	V
San Gabriel Mountains Blue Butterfly ( <i>Plejebus saepiolus aureolus</i> )	C2	N	N	N	N
Callippe Silverspot Butterfly ( <i>Speyeria callippe callippe</i> )	C2	N	N	N	N
Andrew's Marble Butterfly ( <i>Euchloe hyantis andrewsi</i> )	C2	N	N	N	N
Henne's Eucosman Moth ( <i>Eucosma hennei</i> )					
California diplectronan caddisfly ( <i>Diplectrona californica</i> )	C2	N	N	N	N
Tidewater Goby ( <i>Eucyclogobius newberryi</i> )	C2	N	N	N	N
Delta Smelt ( <i>Hypomesus transpacificus</i> )	C2	N	N	N	N
California Tiger Salamander ( <i>Ambystoma tigrinum californiense</i> )	C2	N	N	N	N
Yellow-blotched Ensatina ( <i>Ensatina eschscholtzi croceator</i> )	C2	N	N	N	N
Large-blotched Ensatina ( <i>Ensatina eschscholtzi klauberi</i> )	C2	N	N	N	N
California Red-legged Frog ( <i>Rana aurora draytoni</i> )	C2	N	N	N	N
Arroyo Southwestern Toad ( <i>Bufo microscaphus californicus</i> )	C2	M	N	M	M
<sup>5</sup> Orange-throated Whiptail ( <i>Cnemidophorus hyperythrus</i> )	C2	N	N	V	V
San Diego Horned Lizard ( <i>Phrynosoma cornatna blainvillei</i> )	C2	V	H	V	V
<sup>5</sup> Southwestern Pond Turtle ( <i>Clemmys marmorata</i> )	C2	N	N	M	N
Southern Rubber Boa ( <i>Charina bottae umbratica</i> )	C2 (ST)	N	N	N	N
San Diego Mountain King Snake ( <i>Lampropeltis zonata pulchra</i> )	C2	N	N	N	N
Reddish Egret ( <i>Egretta rufescens</i> )	C2	N	N	N	N
White-faced Ibis ( <i>Plegadis chihii</i> )	C2	N	N	N	N
California Yellow-billed Cuckoo ( <i>Coccyzus americanus occidentalis</i> )	C2 (SE)	N	N	N	N
Belding's Savannah Sparrow ( <i>Ammodramus sandwichensis beldingi</i> )	C2 (SE)	N	N	N	N

**Table B-1a. Wildlife Species Considered for Analysis, (cont.)**

Common Name (Scientific Name) <sup>2</sup>	Status <sup>3</sup>	Presence on Public Land <sup>1</sup>			
		LA-O <sup>4</sup>	B-MT <sup>4</sup>	R-SB <sup>4</sup>	S-DG
Elegant Tern ( <i>Sterna elegans</i> )	C2	N	N	N	N
Swainson's Hawk ( <i>Buteo swainsoni</i> )	C3 (ST)	N	N	V	N
Ferruginous Hawk ( <i>Buteo regalis</i> )	C2	N	N	N	N
Long-billed Curlew ( <i>Numenius americanus</i> )	C2	N	N	N	N
Mountain Plover ( <i>Charadrius montanus</i> )	C2	N	N	N	N
Western Snowy Plover ( <i>Charadrius alexandrinus</i> )	C1	N	N	N	N
Spotted Owl ( <i>Strix occidentalis</i> )	C2	N	L	L	L
<sup>5</sup> California Gnatcatcher ( <i>Poliopitila californica</i> )	C2	M	L	V	V
Southwestern Willow Flycatcher ( <i>Empidonax traillii extimus</i> )	C2	N	N	N	N
Large-billed Savannah Sparrow ( <i>Passerculus sandwichensis rostratus</i> )	C2	N	N	N	N
Tricolored Blackbird ( <i>Agelaius tricolor</i> )	C2	N	N	N	N
Ornate Salt Marsh Shrew ( <i>Sorex ornatus salicornicus</i> )	C2	N	N	N	N
California Leaf-nosed Bat ( <i>Macrotus californicus</i> )	C2	N	N	N	V
Spotted bat ( <i>Euderma maculatum</i> )	C2	N	N	N	M
Pacific Western Big-eared Bat ( <i>Plecotus townsendii townsendii</i> )	C2	N	N	N	N
Mexican Long-tongued Bat ( <i>Choeronycteris mexicana</i> )	C2	N	N	N	M
Mohave Ground Squirrel ( <i>Spermophilus mohavensis</i> )	C2 (ST)	N	N	N	N
San Bernardino Flying Squirrel ( <i>Glaucomys sabrinus californicus</i> )	C2	N	N	N	N
Los Angeles Pocket Mouse ( <i>Perognathus longimembris brevinasus</i> )	C2	N	M	M	N
Pacific Little Pocket Mouse ( <i>Perognathus longimembris pacificus</i> )	C2	N	N	N	N
Tehachapi White-eared Pocket Mouse ( <i>Perognathus alticola inexpectatus</i> )	C2	N	N	N	N
Southern Marsh Harvest Mouse ( <i>Reithrodontomys megalotis limicola</i> )	C2	N	N	N	N
Southwestern Otter ( <i>Lutra canadensis sonorae</i> )	C2	N	N	N	N
Peninsular Bighorn Sheep ( <i>Ovis canadensis cremnobates</i> )	C2 (ST)	N	N	N	N

**State-Listed Species**

All "State-listed Species" are covered under "Federally Listed and Proposed Species" or "Federal Candidate Species".

**Game Species**

<sup>5</sup> Mule Deer ( <i>Odocoileus hemionus</i> )	V	V	H	V
Cottontail Rabbit ( <i>Sylvilagus auduboni</i> & <i>S. bachmani</i> )	V	V	V	V
<sup>5</sup> California Quail ( <i>Lophortyx californicus</i> )	V	V	V	V
Mourning Dove ( <i>Zenaidura macroura</i> )	V	V	V	V
<sup>5</sup> Mountain Quail ( <i>Oreortyx pictus</i> )	V	V	V	V
Band-tailed Pigeon ( <i>Columba fasciata</i> )	V	V	V	V

1. Presence on Public Land

P - Low to moderate probability for occurrence on Public Lands. V - Verified occurrence on Public Lands.  
 N - Does not (or is very unlikely to) occur on Public Lands. H - Probable occurrence on Public Lands.

2. Species analyzed in RMP/EIS.

3. Status

E - Federal Listed Endangered Species: species in danger of extinction throughout all or a significant portion of its range.  
 T - Federal Listed Threatened Species: species likely to become an endangered within the foreseeable future.  
 P - Federal Listed Proposed Species: species proposed for listing as "Threatened" or as "Endangered".  
 C-1 - Federal Candidate Species for which the USFWS has sufficient information to support listing.  
 C-2 - Federal Candidate Species for which the USFWS does not have sufficient information to support listing.  
 SE - State Listed Endangered Species: native California species in danger of extinction throughout all, or a significant portion of, its range.  
 ST - State Listed Threatened Species: native California species likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts.  
 SC - State Listed Candidate Species: any native California species formally noticed by the California Fish and Game Commission as being under review by the Department for addition to the list of threatened or endangered species.

4. S-DG - San Diego County Management Area R-SB - Riverside-San Bernardino County Management Area  
 B-MT - Beauty Mountain Management Area LA-O - Los Angeles/Orange County Management Area

5. Species analyzed in RMP/EIS.

**Table B-1b. Occurrence of Special Status Wildlife Species and Important Wildlife Habitat Types Considered for Analysis**

**San Diego County Management Area**

Parcel No.	Special Status Species <sup>1</sup>	Important Wildlife Habitat Type
216-361	Least Bell's Vireo (M)	Riparian (South Coast Live Oak Riparian Forest/Southern Sycamore-Alder Riparian Woodland/Southern Willow Scrub)
217-261	Least Bell's Vireo (M)	Coastal and Valley Freshwater Marsh Riparian (South Coast Live Oak Riparian Forest/ Southern Sycamore-Alder Riparian Woodland/Southern Willow Scrub)
228-101	Least Bell's Vireo (M)	Riparian (South Coast Live Oak Riparian Forest/Southern Sycamore-Alder Riparian Woodland/Southern Willow Scrub) <sup>2</sup>
228-151	California Gnatcatcher (H)	Coastal Sage Scrub
247-011		Riparian (South Coast Live Oak Riparian Forest/Southern Sycamore-Alder Riparian Woodland)
253-331		Coastal Sage Scrub
255-051		Lake <sup>2</sup>
255-231	California Gnatcatcher (V) Least Bell's Vireo (M)	Coastal Sage Scrub Riparian (South Coast Live Oak Riparian Forest/Southern Sycamore-Alder Riparian Woodland/Southern Willow Scrub)
255-271		Coastal Sage Scrub
260-031	California Gnatcatcher (V)	Coastal Sage Scrub
260-231	Orange-throated Whiptail (V)	Coastal Sage Scrub
262-212	Least Bell's Vireo (H)	Riparian (South Willow Scrub/South Coast Live Oak Riparian Forest)
263-361		Coastal Sage Scrub
264-081		Coastal Sage Scrub
264-082		Coastal Sage Scrub
264-191		Coastal Sage Scrub
269-251	Orange-throated Whiptail (V)	Coastal Sage Scrub Riparian (South Coast Live Oak Riparian Forest/ Southern Sycamore-Alder Riparian Forest/ Southern Willow Scrub)
290-081		Coastal Sage Scrub
290-201	California Gnatcatcher (H)	Coastal Sage Scrub
290-291	California Gnatcatcher (H)	Coastal Sage Scrub

**Table B-1b. Occurrence of Special Status Wildlife Species and Important Wildlife Habitat Types Considered for Analysis, (cont.)**

**San Diego County Management Area**

Parcel No.	Special Status Species <sup>1</sup>	Important Wildlife Habitat Type
293-323	.....	Riparian (South Coast Live Oak Riparian Forest/Southern Willow Scrub)
293-331	Least Bell's Vireo (M) .....	Coastal and Valley Freshwater Marsh <sup>2</sup> Riparian (South Coast Live Oak Riparian Forest/Southern Cottonwood-Willow Scrub)
299-011	California Gnatcatcher (H) .....	Coastal Sage Scrub Riparian (South Coast Live Oak Riparian Forest)
299-181	California Gnatcatcher (V) .....	Coastal Sage Scrub
300-021	.....	Coastal Sage Scrub
300-121	.....	Coastal Sage Scrub
300-151	.....	Coastal Sage Scrub
301-151	.....	Perennial Stream <sup>2</sup>
302-151	California Gnatcatcher (H) .....	Coastal Sage Scrub
	Least Bell's Vireo (M)	Riparian (South Coast Live Oak Riparian Forest/ Southern Willow Scrub)
305-151	.....	Perennial Stream <sup>2</sup>

**Table B-1b. Occurrence of Special Status Wildlife Species and Important Wildlife Habitat Types Considered for Analysis, (cont.)**

**Riverside-San Bernardino County Management Area**

<b>Parcel No.</b>	<b>Special Status Species<sup>1</sup></b>	<b>Important Wildlife Habitat Type</b>
107-101	Least Bell's Vireo (L)	Coastal Sage Scrub Riparian (Southern Willow Scrub)
144-021	California Gnatcatcher (H)	Coastal Sage Scrub
144-041	California Gnatcatcher (H)	Coastal Sage Scrub Riparian (Mule Fat Scrub)
144-101	Stephen's Kangaroo Rat (V) California Gnatcatcher (H)	Coastal Sage Scrub Riparian (Southern Sycamore-Alder Riparian Woodland)
145-241	Stephen's Kangaroo Rat (V)	
145-281	Stephen's Kangaroo Rat (V) California Gnatcatcher (H)	Coastal Sage Scrub
145-282	Stephen's Kangaroo Rat (V) California Gnatcatcher (H)	Coastal Sage Scrub
145-321	Stephen's Kangaroo Rat (V) California Gnatcatcher (H)	Coastal Sage Scrub
160-141	Stephen's Kangaroo Rat (V) California Gnatcatcher (V)	Coastal Sage Scrub
160-241	Stephen's Kangaroo Rat (V) California Gnatcatcher (V)	Coastal Sage Scrub
160-281	California Gnatcatcher (V) Least Bell's Vireo (L)	Coastal Sage Scrub Riparian (Southern Willow Scrub)
160-321	Stephen's Kangaroo Rat (V) California Gnatcatcher (H) Least Bell's Vireo (L)	Coastal Sage Scrub Riparian (Southern Willow Scrub)
162-221		Coastal Sage Scrub
162-261	Orange-throated Whiptail (V)	Coastal Sage Scrub
164-021	Least Bell's Vireo (M)	Riparian (Southern Willow Scrub/ South Coast Live Oak Riparian Forest)
175-081	Stephen's Kangaroo Rat (V) Orange-throated Whiptail (V)  California Gnatcatcher (H)	Coastal Sage Scrub Riparian (South Coast Live Oak Riparian Forest)
175-101	Stephen's Kangaroo Rat (V) California Gnatcatcher (H)	Coastal Sage Scrub Riparian (Southern Willow Scrub)
175-241	California Gnatcatcher (V) Orange-throated Whiptail (V)	Coastal Sage Scrub Riparian (Southern Willow Scrub)
176-041	Stephen's Kangaroo Rat (V) California Gnatcatcher (H) Least Bell's Vireo (L)	Coastal Sage Scrub Riparian (Southern Willow Scrub)
176-141	Stephen's Kangaroo Rat (V)	Coastal Sage Scrub

**Table B-1b. Occurrence of Special Status Wildlife Species and Important Wildlife Habitat Types Considered for Analysis, (cont.)**

**Riverside-San Bernardino County Management Area**

<b>Parcel No.</b>	<b>Special Status Species<sup>1</sup></b>	<b>Important Wildlife Habitat Type</b>
176-201	Stephen's Kangaroo Rat (V) California Gnatcatcher (H) Least Bell's Vireo (L)	Coastal Sage Scrub Riparian (Southern Willow Scrub)
176-221	California Gnatcatcher (H)	Coastal Sage Scrub
176-261	Stephen's Kangaroo Rat (V) California Gnatcatcher (H) Least Bell's Vireo (M)	Coastal Sage Scrub Riparian (Southern Willow Scrub)
176-281	Stephen's Kangaroo Rat (V)	Coastal Sage Scrub
176-341	Stephen's Kangaroo Rat (V) California Gnatcatcher (H) Least Bell's Vireo (M)	Coastal Sage Scrub Riparian (Southern Willow Scrub)
177-181	Stephen's Kangaroo Rat (V)	Coastal Sage Scrub
177-301	Stephen's Kangaroo Rat (V) Orange-throated Whiptail (V) California Gnatcatcher (H)	Coastal Sage Scrub
179-261		Coastal Sage Scrub
180-141	California Gnatcatcher (H)	Coastal Sage Scrub
180-272	Orange-throated Whiptail (V)	Coastal Sage Scrub
180-281	Orange-throated Whiptail (V)	Coastal Sage Scrub
180-341	Orange-throated Whiptail (V)	Coastal Sage Scrub Riparian (South Coast Live Oak Riparian Forest/Southern Sycamore-Alder Riparian Woodland)
189-101	Stephen's Kangaroo Rat (V) California Gnatcatcher (V)	Coastal Sage Scrub
190-302		Coastal Sage Scrub
190-321	Least Bell's Vireo (V)	Riparian (South Coast Live Oak Riparian Forest/Southern Willow Scrub)
191-041		Coastal Sage Scrub
191-061	Stephen's Kangaroo Rat (V) California Gnatcatcher (H)	Coastal Sage Scrub
191-241	Stephen's Kangaroo Rat (V) California Gnatcatcher (H)	Coastal Sage Scrub
191-242	Stephen's Kangaroo Rat (V) California Gnatcatcher (H)	Coastal Sage Scrub
192-061	California Gnatcatcher (H)	Coastal Sage Scrub
192-101		Coastal Sage Scrub
193-041		Coastal Sage Scrub



**Table B-1b. Occurrence of Special Status Wildlife Species and Important Wildlife Habitat Types Considered for Analysis, (cont.)**

**Riverside-San Bernardino County Management Area**

Parcel No.	Special Status Species <sup>1</sup>	Important Wildlife Habitat Type
193-181	.....	Coastal Sage Scrub
205-121	Least Bell's Vireo (M) .....	Coastal Sage Scrub Riparian (Southern Willow Scrub)
205-321	Wright's checkerspot butterfly (H)	
205-341	Wright's checkerspot butterfly (H) .....	Coastal Sage Scrub
206-301	.....	Coastal Sage Scrub
216-251	.....	Riparian (Mule Fat Scrub)
218-261	Least Bell's Vireo (H) .....	Coastal Sage Scrub
	Southwestern pond turtle (M) .....	Riparian (South Coast Live Oak Riparian Forest/Southern Willow Scrub)
218-331	Least Bell's Vireo (H) .....	Coastal Sage Scrub
	Southwestern pond turtle (M)	Riparian (South Coast Live Oak Riparian Forest/Southern Sycamore-Alder Riparian Woodland/Southern Willow Scrub)
219-241	.....	Coastal Sage Scrub Spring2
220-041	Wright's checkerspot butterfly (H) .....	Coastal Sage Scrub
221-332	Orange-throated whiptail (V) .....	Coastal Sage Scrub Riparian (South Coast Live Oak Riparian Forest)
247-331	Southwestern pond turtle (M)	
247-332	Southwestern pond turtle (M)	

**Table B-1b. Occurrence of Special Status Wildlife Species and Important Wildlife Habitat Types Considered for Analysis, (cont.)**

**Beauty Mountain Management Area**

Parcel No.	Special Status Species1	Important Wildlife Habitat Type
223-221	.....	Coastal Sage Scrub
233-221	.....	Riparian (South Coast Live Oak Riparian Forest/Southern Cottonwood-Willow Riparian Forest)

**Table B-1b. Occurrence of Special Status Wildlife Species and Important Wildlife Habitat Types Considered for Analysis, (cont.)**

**Los Angeles-Orange County Management Area**

<b>Parcel No.</b>	<b>Special Status Species1</b>	<b>Important Wildlife Habitat Type</b>
001-261	.....	Coastal Sage Scrub
002-161	California Condor (M)	
002-361	California Condor (M)	
003-311	California Condor (L/M)	
011-261	California Condor (M/H)	
012-311	California Condor (M/H) .....	Coastal Sage Scrub Riparian (Southern Sycamore-Alder Riparian Woodland
016-031	California Condor (H) .....	Coastal Sage Scrub Riparian (Southern Cottonwood-Willow Riparian Forest)
017-071	California Condor (H) .....	Coastal Sage Scrub
017-201	California Condor (H)	
018-311	California Condor (M)	
019-241	.....	Coastal Sage Scrub
019-291	California Condor (M)	
019-331	California Gnatcatcher (M) .....	Coastal Sage Scrub
	California Condor (M)	
019-361	.....	Coastal Sage Scrub
020-081	.....	Coastal Sage Scrub
020-131	.....	Coastal Sage Scrub
020-221	.....	Coastal Sage Scrub
020-261	California Condor (M) .....	Coastal Sage Scrub
020-271	California Condor (M) .....	Coastal Sage Scrub
022-041	California Condor (H)	
022-051	California Condor (H)	
022-061	California Condor (H)	
022-101	California Condor (M/H) .....	Coastal Sage Scrub
024-121	California Condor (M) .....	Coastal Sage Scrub
024-151	California Condor (M)	
025-051	California Condor (M) .....	Coastal Sage Scrub
025-061	California Condor (M)	
026-021	California Condor (M) .....	Coastal Sage Scrub

**Table B-1b. Occurrence of Special Status Wildlife Species and Important Wildlife Habitat Types Considered for Analysis, (cont.)**

**Los Angeles-Orange County Management Area**

Parcel No.	Special Status Species <sup>1</sup>	Important Wildlife Habitat Type
026-041	.....	Coastal Sage Scrub
026-042	California Gnatcatcher (M) .....	Coastal Sage Scrub
026-071	California Condor (M)	
026-141	California Condor (M)	
032-021	California Condor (M)	
032-111	California Condor (M)	
032-112	California Condor (M)	
032-121	California Condor (M)	
032-122	California Condor (M)	
033-081	California Condor (M) .....	Coastal Sage Scrub
033-191	California Condor (M)	

- (V) Verified or known historic occurrence.  
 (H) High probability of occurrence.  
 (M) Moderate probability of occurrence.  
 (L) Low probability of occurrence.  
 Habitat evaluations for California Condor, H=Core habitat; M=Main range limits; L=Expected range extension areas
- Parcel contains perennial surface water.

## Special Status Plants and Plant Communities

Special status plants are considered as those plant species that are listed, proposed, or are candidates for listing by the U.S. Fish & Wildlife Service as threatened or endangered, or that are listed by the California Department of Fish & Game as endangered, threatened, or rare. The occurrence of any of these sensitive plant species on public lands is a factor considered in the planning process for the South Coast Planning Area. Palmer's grapplehook is also considered because of its rarity, even though it is not currently listed as threatened or endangered, nor is it yet a candidate for listing. A complete site inventory of each parcel at the proper season was not feasible in order to determine the actual occurrence of sensitive plant species; however, the potential for occurrence of the species listed in Table B-2 was evaluated as part of the planning effort as follows:

- (1) A list of all potential sensitive plant species was developed, using information from Natural Diversity Data Base (NDDDB), California Native Plant Society (CNPS) data, and existing BLM inventories and surveys. This list includes species-specific information on their ecology, habitats, associated plant communities, and known occurrences and range.
- (2) For most public land parcels in the South Coast Planning Area, site-specific data on the physical environment and the plant communities occurring on these parcels were collected either from ground surveys or from helicopter surveys, depending on access restrictions and time constraints.
- (3) Parcel-specific data were combined with species-specific information from (1) to produce a predictive model of the likelihood of any of these species to occur on any BLM parcel, using the following rating:

VERIFIED (V): a species is known to occur because of documentation of its occurrence in the NDDDB or in other sources or files.

HIGH POTENTIAL (H): a location has a high potential for occurrence of a given species if it satisfies all of the following criteria:

1. The site lies within a five-mile radius of a known occurrence for that species;
2. Elevation of the site is within the known elevational range of that species;
3. Vegetation of the site is of a similar type to that which is known to occur in association with that species.

MODERATE POTENTIAL (M): a location has a moderate potential for occurrence of a given species if it satisfies criteria (1) and (3) above, its elevation is not within the elevation range of that species, but is no more than 500 feet above or below the maximum and minimum, respectively, for that range.

LOW POTENTIAL (L): plant species falling below 'moderate potential' for occurrence on a given parcel were not considered for analysis. This should not be construed to imply that a given species cannot be found on any given parcel, but simply that a lower likelihood class would not be useful in the analysis since it would have an infinite geographic range.

- (4) This predictive model was applied to each BLM-administered parcel and a set of potential sensitive species was generated for each parcel.

- (5) Finally, parcel data and survey photos were reviewed to refine the likelihood class of these species for each parcel.

A total of 56 sensitive plant species were identified as potentially occurring on BLM parcels. "Sensitive species" are species that have been "listed" as rare (R), threatened (T), or endangered (E) by the State of California Department of Fish and Game (CDF&G) and/or by the U.S. Fish and Wildlife Service (USFWS), species which are "candidates" for listing by either one of these agencies and species that were recommended for consideration. Table B-2 lists by management area those species considered for analysis. Evaluation of the likelihood of occurrence on a parcels specific basis is presented in Table B-4.

## **Plant Communities**

Twenty-seven natural plant communities (or "vegetation types") as described by Holland (1986) have been identified as occurring on public land in the South Coast Planning Area. The presence of these plant communities on BLM public land in each management area is shown on Table B-3. Plant communities were selected for analysis because of their relation to sensitive species and importance in maintaining biological diversity. Data collected during field surveys were used to assign one or more of the vegetation types to all BLM public land parcels. Ten of the plant communities have been identified by Holland (1986) as "rare" and are considered by BLM biologists as "sensitive", and are so identified in Table B-3. The occurrence of these communities on specific parcels is shown in Table B-4. Agricultural activities, urban and industrial development, and road construction have been mostly responsible for the loss of habitat suitable for these plant communities.

Parcels which contain sensitive plant communities that were considered to be viable and/or manageable are marked in Table B-4. Parcels with sensitive plant communities that were determined to not be viable and/or manageable were given that assessment based on the following criteria:

- The community is presently impacted or is likely to be impacted in the future by surrounding land uses beyond BLM's control;
- The parcel is considered unmanageable because of its small size and its isolated geographic location in relation to other lands that are managed for their natural resource values.

**Table B-2. Sensitive Plant Species Considered for Analysis**

COMMON NAME	SCIENTIFIC NAME	STATUS	MANAGEMENT AREA			
			LA-O	B-MT	RI-SB	S-DG
Beach spectacle pod	<i>Dithyrea maritima</i>	C2	2			
Bear grass	<i>Nolina interrata</i>	C1,SE				2
Bird-footed checkerbloom	<i>Sidalcea pedata</i>	FE,SE			2	
Braunton's milk vetch	<i>Astragalus brauntonii</i>	C2	3			
California orcutt grass	<i>Orcuttia californica</i>	C1,SE			1	
Cleveland goldenstars	<i>Muilla clevelandii</i>	C2			3	3
Cuyamaca larkspur	<i>Delphinium hesperium</i> <i>ssp.cuyamacae</i>	C2,SR			2	
Cuyamaca meadowfoam	<i>Limnanthes gracilis</i> var. <i>parishii</i>	C2,SE				2
Deane's milk vetch	<i>Astragalus deanei</i>	C2				2
Dense reed glass	<i>Calamagrostis densa</i>	3C				3
Dunn's mariposa-lily	<i>Calochortus dunnii</i>	C2,SR	3			3
Encinitas coyotebush	<i>Baccharis vanessae</i>	C,SE				2
Felt-leaved monardella	<i>Monardella hypoleuca</i> ssp. <i>lanata</i>	3C				3
Gander's pitcher sage	<i>Lepechinia ganderi</i>	C2				1
Jacumba locoweed	<i>Astragalus douglassii</i> var. <i>perstrictus</i>	C2				3
Johnston's rock cress	<i>Arabis johnstonii</i>	C1			3	
Lakeside ceanothus	<i>Ceanothus cyaneus</i>	C2			2	3
Little mousetail	<i>Mysourus minimus</i> var. <i>apus</i>	C2				2
Los Angeles sunflower	<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	C1	2			
Lyon's pentachaeta	<i>Pentachaeta lyonii</i>	C1	2			
Many-stemmed dudleya	<i>Dudleya multicaulis</i>	C2	2		1	
Mexican fremontia	<i>Fremontodendron mexicanum</i>	C2,SR				1
Mission Canyon blue-cup	<i>Githopsis diffusa</i> ssp. <i>filicaulis</i>	C2			2	
Mt. Gleason Indian paintbrush	<i>Castilleja gleasonii</i>	C2,SR	2			
Munz's onion	<i>Allium fimbriatum</i> var. <i>munzii</i>	C1,SE			3	
Narrow-leaved nightshade	<i>Solanum tenuilobatum</i>	C2		3		3
Nevin's barberry	<i>Mahonia nevinii</i>	C1,SE	3	3	3	1
Orcutt's brodiaea	<i>Brodiaea orcutti</i>	C2		2	2	3
Orcutt's linanthus	<i>Linanthus orcutti</i>	C2	2	1		
Otay manzanita	<i>Arctostaphylos otayensis</i>	C2				3
Otay tarplant	<i>Hemizonia conjugens</i>	C2,SE				1
Palmer's grapplinghook	<i>Harpagonella palmeri</i> var. <i>palmeri</i>	N/A	3		1	1
Parry's tetracoccus	<i>Tetracoccus dioicus</i>	C2			3	3
Payson's jewelflower	<i>Caulanthus simulans</i>	C2		3	3	1
Peirson's morning-glory	<i>Calystegia peirsonii</i>	C2	2			
San Bernardino blue grass	<i>Poa atropurpurea</i>	C1			2	
San Diego barrel cactus	<i>Ferrocactus viridescens</i>	C2				3
San Diego currant	<i>Ribes canthariforme</i>	C2				3
San Diego rattleweed	<i>Astragalus oocarpus</i>	C2				3
San Diego thornmint	<i>Acanthomintha ilicifolia</i>	C2,SE				3
San Felipe monardella	<i>Monardella nana</i> ssp. <i>leptosiphon</i>	C2		3		
San Fernando Valley spineflower	<i>Chorizanthe parryi</i> var. <i>fernandina</i>	C1	3			
San Gabriel bedstraw	<i>Galium grande</i>	C2	3			
San Jacinto Valley saltbush	<i>Atriplex coronata</i> var. <i>notatior</i>	C2			2	
San Miguel savory	<i>Calamintha chandeleri</i>	3C				1
Santa Ana River woolly-star	<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	FE,SE			1	
Santa Monica Mtns. dudleya	<i>Dudleya cymosa</i> ssp. <i>marcescens</i>	C2,SR	2			

Table B-2. Sensitive Plant Species Considered for Analysis, (cont.)

COMMON NAME	SCIENTIFIC NAME	STATUS	MANAGEMENT AREA			
			LA-O	B-MT	RI-SB	S-DG
Santa Suzana tarplant	<i>Hemizonia minthornii</i>	C2,SR	2			
Short-joint beavertail	<i>Opuntia basilaris</i> v. <i>brachyclada</i>	C2	2			
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	FE,SE	3		3	
Slender-pod jewelflower	<i>Caulanthus stenocarpus</i>	C2,SR		3		1
Tecate cypress	<i>Cupressus forbesii</i>	C2				3
Tecate tarplant	<i>Hemizonia floribunda</i>	C2				3
Threadleaf brodiaea	<i>Brodiaea filifolia</i>	C1,SE	2		3	2
Variiegated dudleya	<i>Dudleya variegata</i>	C2				1
Warner Springs lessingia	<i>Lessingia glandulifera</i> var. <i>tomentosa</i>	C2				2

FE - Federally listed as endangered

SE - State listed as endangered

SR - State listed as rare

C1 - Candidate 1 for Federal listing

C2 - Candidate 2 for Federal listing

3C - Previously candidate for Federal listing at time of inventory

1 - BLM-administered surface

2 - Split-estate, private surface with BLM-administered subsurface mineral rights

3 - BLM-administered surface and split-estate



**Table B-3. Natural Plant Communities of the South Coast Planning Area**

Natural Communities (Organized by Habitats)	Presence on Public Land			SDG <sup>1</sup>
	LA-O1	B-MT <sup>1</sup>	R-SB <sup>1</sup>	
<b>SCRUBS:</b>				
1. Venturan Coastal Sage Scrub	X			
2. Diegan Sage Scrub*		X	X	X
3. Riversidean Sage Scrub*	X		X	
<b>CHAPARRALS:</b>				
4. Northern Mixed Chaparral	X			
5. Southern Mixed Chaparral		X	X	X
6. Chamise Chaparral	X	X	X	X
7. Redshank Chaparral		X		X
8. Semi-desert Chaparral		X		X
9. Scrub Oak Chaparral	X			
10. Upper sonoran Manzanita Chaparral		X		
11. Coastal Sage-Chaparral Scrub	X			X
<b>GRASSLANDS:</b>				
12. Non-native Grassland	X		X	X
<b>WETLANDS:</b>				
13. Freshwater Seep*				X
14. Coastal and Valley Freshwater Marsh*				X
<b>RIPARIAN HABITATS:</b>				
15. South Coast Live Oak riparian Forest*	X	X	X	X
16. Southern Cottonwood-Willow Riparian Forest*	X	X		X
17. Southern Sycamore-Alder Riparian Woodland*	X		X	X
18. Mule Fat Scrub		X	X	
19. Southern Willow Scrub*	X		X	X
<b>WOODLANDS:</b>				
20. Coast Live Oak Woodland			X	X
21. Alvord Oak Woodland	X			
22. Open Engelman Oak Woodland*				X
23. Dense Engelman Oak Woodland*				X
24. Peninsular Juniper Woodland and Scrub	X		X	
<b>FORESTS:</b>				
25. Southern Interior Cypress Forest				X
26. Coulter Pine Forest		X		X

1. Management Area Codes

- LA-O - Los Angeles/Orange County Management Area
- B-MT - Beauty Mountain Management Area
- R-SB - Riverside-San Bernardino County Management Area
- S-DG - San Diego County Management Area

X. Denotes presence on BLM public lands within management area.

\*. Considered "rare" by Holland (1986)

**Table B-4. Occurrence of Sensitive Plant Species and Natural Communities**

**San Diego County Management Area**

<b>Parcel No.</b>	<b>Sensitive Plant Species<sup>1</sup></b>	<b>Sensitive Natural Plant Community</b>
216-361	.....	South Coast Live Oak Riparian Forest <sup>2</sup> Southern Sycamore-Alder Riparian Woodland <sup>2</sup> Southern Willow Scrub
217-261	Orcutt's brodiaea (H) .....	Coastal and Valley Freshwater Marsh <sup>2</sup> Southern Willow Scrub <sup>2</sup> Southern Sycamore-Alder Riparian Woodland <sup>2</sup> South Coast Live Oak Riparian Forest <sup>2</sup>
228-031	Parry's tetraococcus (V) .....	Coastal and Valley Freshwater Marsh
228-101	Parry's tetraococcus (V) .....	Southern Willow Scrub <sup>2</sup>
	Orcutt's brodiaea (H)	Southern Sycamore-Alder Riparian Woodland <sup>2</sup> South Coast Live Oak Riparian Forest <sup>2</sup>
228-151	.....	Diegan Sage Scrub
229-041	.....	South Coast Live Oak Riparian Forest
241-012	San Diego rattleweed (H) .....	South Coast Live Oak Riparian Forest <sup>2</sup> Southern Cottonwood-Willow Riparian Forest
245-091	Lakeside ceanothus (V)	
246-251	.....	South Coast Live Oak Riparian Forest <sup>2</sup> Southern Willow Scrub
247-011	Felt-leaved monardella (V) .....	Southern Sycamore-Alder Riparian Woodland <sup>2</sup>
	Nevin's barberry (H)	South Coast Live Oak Riparian Forest <sup>2</sup>
	Dense reed grass (V)	
	Orcutt's brodiaea (H)	
247-332	Orcutt's brodiaea (H) .....	South Coast Live Oak Riparian Forest <sup>2</sup> Southern Sycamore Alder Riparian Forest
249-321	Dense reed grass (H)	
253-331	.....	Diegan Sage Scrub
254-331	Wart-stemmed ceanothus (V) .....	South Coast Live Oak Riparian Forest
255-151	Slender-pod jewelflower (H)	
255-231	Slender-pod jewelflower (H) .....	Diegan Sage Scrub <sup>2</sup> Southern Sycamore-Alder Riparian Woodland <sup>2</sup> South Coast Live Oak Riparian Forest <sup>2</sup> Southern Willow Scrub <sup>2</sup>
255-271	Slender-pod jewelflower (H) .....	Diegan Sage Scrub <sup>2</sup> South Coast Live Oak Riparian Forest
256-311	.....	South Coast Live Oak Riparian Forest <sup>2</sup> Southern Sycamore-Alder Riparian Woodland
257-041	Dense reed grass (M)	
257-091	Dense reed grass (M) .....	South Coast Live Oak Riparian Forest <sup>2</sup>
260-231	.....	Diegan Sage Scrub
261-061	Wart-stemmed ceanothus (V)	

**Table B-4. Occurrence of Sensitive Plant Species and Natural Communities, (cont.)**

**San Diego County Management Area**

<b>Parcel No.</b>	<b>Sensitive Plant Species<sup>1</sup></b>	<b>Sensitive Natural Plant Community</b>
262-212	.....	Southern Willow Scrub <sup>2</sup> South Coast Live Oak Riparian Forest
263-351	.....	South Coast Live Oak Riparian Forest
263-361	.....	Diegan Sage Scrub
264-081	.....	Dense Engelmann Oak Woodland <sup>2</sup> Diegan Sage Scrub
264-082	.....	Open Engelmann Oak Woodland <sup>2</sup> South Coast Live Oak Riparian Forest <sup>2</sup> Southern Sycamore-Alder Riparian Woodland Diegan Sage Scrub
264-151	Orcutt's brodiaea (H) .....	Open Engelmann Oak Woodland <sup>2</sup> South Coast Live Oak Riparian Forest
264-191	Lakeside ceanothus (H) ..... Orcutt's brodiaea (H) ..... Parry's tetraococcus (H) .....	Southern Cottonwood-Willow Riparian Forest <sup>2</sup> South Coast Live Oak Riparian Forest <sup>2</sup> Diegan Sage Scrub <sup>2</sup>
269-251	Lakeside ceanothus (V) ..... Otay manzanita (V) ..... Dense reed grass (M) .....	Diegan Sage Scrub South Coast Live Oak Riparian Forest <sup>2</sup> Southern Sycamore-Alder Riparian Woodland <sup>2</sup> Southern Willow Scrub <sup>2</sup>
270-051	.....	South Coast Live Oak Riparian Forest Southern Sycamore-Alder Riparian Woodland Southern Willow Scrub Coastal and Valley Freshwater Marsh
270-192	.....	South Coast Live Oak Riparian Forest Southern Willow Scrub
283-351	Dense reed grass (M)	
290-081	.....	Diegan Sage Scrub
290-201	Dunn's mariposa-lily (V) ..... Gander's pitcher sage (V) ..... Narrow-leaved nightshade (V) ..... Variegated dudleya (V) .....	Diegan Sage Scrub
291-091	San Diego currant (V) ..... Dense reed grass (H) .....	South Coast Live Oak Riparian Forest <sup>2</sup>
292-191	Dense reed grass (M)	
292-251	.....	Southern Sycamore-Alder Riparian Woodland <sup>2</sup> South Coast Live Oak Riparian Forest <sup>2</sup>
292-281	.....	Southern Sycamore-Alder Riparian Woodland <sup>2</sup> South Coast Live Oak Riparian Forest <sup>2</sup> Southern Willow Scrub
292-301	Dense reed grass (M)	
292-311	.....	South Coast Live Oak Riparian Forest <sup>2</sup>

**Table B-4. Occurrence of Sensitive Plant Species and Natural Communities, (cont.)**

**San Diego County Management Area**

<b>Parcel No.</b>	<b>Sensitive Plant Species<sup>1</sup></b>	<b>Sensitive Natural Plant Community</b>
292-331	.....	Southern Sycamore-Alder Riparian Woodland <sup>2</sup> South Coast Live Oak Riparian Forest <sup>2</sup> Southern Willow Scrub <sup>2</sup>
293-301	.....	Southern Sycamore-Alder Riparian Woodland South Coast Live Oak Riparian Forest
293-321	.....	South Coast Live Oak Riparian Forest
293-322	.....	Southern Sycamore-Alder Riparian Woodland
293-323	.....	South Coast Live Oak Riparian Forest Southern Willow Scrub
293-331	Narrow-leaved nightshade (V) .....	Coastal & Valley Freshwater Marsh <sup>2</sup> South Coast Live Oak Riparian Forest <sup>2</sup> Southern Willow Scrub <sup>2</sup> Southern Cottonwood-Willow Riparian Forest <sup>2</sup>
293-332	.....	Southern Sycamore-Alder Riparian Woodland South Coast Live Oak Riparian Forest
294-131	Payson's jewelflower (H)	
294-132	Payson's jewelflower (H) .....	South Coast Live Oak Riparian Forest Southern Willow Scrub
	Sand Diego currant (H)	
	Jacumba locoweed	
294-211	Sand Diego currant (M)	
295-071	Payson's jewelflower (H)	
299-011	Dense reed grass (V) .....	Diegan Sage Scrub <sup>2</sup>
	Dunn's mariposa-lily (V)	South Coast Live Oak Riparian Forest <sup>2</sup>
	Felt-leaved monardella (V)	Southern Interior Cypress Forest <sup>2</sup>
	Gander's pitcher sage (V)	
	Lakeside ceanothus (V)	
	Mexican fremontia (V)	
	Narrow-leaved nightshade (V)	
	Orcutt's brodiaea (V)	
	Otay manzanita (V)	
	Otay tarplant (V)	
	Palmer's grapplinghook (V)	
	San Diego barrel cactus (V)	
	San Diego thornmint (H)	
	San Miguel savory (V)	
	Slender-pod jewelflower (V)	
	Tecate cypress (V)	
	Tecate tarplant (V)	
299-181	Cleveland goldenstars (H) .....	Diegan Sage Scrub <sup>2</sup>
	Orcutt's brodiaea (H)	
	San Diego barrel cactus (V)	
	San Diego thornmint (H)	
	Variiegated dudleya (H)	
300-021	.....	Diegan Sage Scrub <sup>2</sup>
300-121	.....	Diegan Sage Scrub <sup>2</sup>

**Table B-4. Occurrence of Sensitive Plant Species and Natural Communities, (cont.)**

**San Diego County Management Area**

Parcel No.	Sensitive Plant Species <sup>1</sup>	Sensitive Natural Plant Community
300-131	.....	Freshwater Seep <sup>2</sup> Southern Cottonwood-Willow Riparian Forest <sup>2</sup>
300-151	.....	Southern Cottonwood-Willow Riparian Forest <sup>2</sup> Diegan Sage Scrub South Coast Live Oak Riparian Forest
301-151	.....	Southern Cottonwood-Willow Riparian Forest <sup>2</sup>
301-211	Felt-leaved monardella (V) ..... Narrow-leaved nightshade (V) ..... Slender-pod jewelflower (V) ..... Tecate cypress (V) .....	Southern Interior Cypress Forest <sup>2</sup>
302-061	.....	Southern Sycamore-Alder Riparian Woodland South Coast Live Oak Riparian Forest
302-151	Dense reed-grass (M) ..... Felt-leaved monardella (M) ..... Tecate tarplant (H) .....	South Coast Live Oak Riparian Forest Southern Willow Scrub Diegan Sage Scrub
302-211	Slender-pod jewelflower (H) ..... Tecate tarplant (H) ..... Felt-leaved monardella (H) .....	
302-241	Tecate tarplant (H) .....	South Coast Live Oak Riparian Forest Southern Cottonwood-Willow Riparian Forest
303-121	Tecate tarplant (H) ..... Jacumba locoweed (H) .....	South Coast Live Oak Riparian Forest <sup>2</sup>
303-171	Tecate tarplant (H) .....	
303-191	Tecate tarplant (H) .....	
303-211	Tecate tarplant (M) .....	
303-221	Tecate tarplant (M) .....	
305-091	.....	Southern Willow Scrub <sup>2</sup> South Coast Live Oak Riparian Forest <sup>2</sup>
305-151	.....	Coastal & Valley Freshwater Marsh South Coast Live Oak Riparian Forest Southern Willow Scrub

**Table B-4. Occurrence of Sensitive Plant Species and Natural Communities, (cont.)**

**Riverside-San Bernardino County Management Area**

<b>Parcel No.</b>	<b>Sensitive Plant Species<sup>1</sup></b>	<b>Sensitive Natural Plant Community</b>
107-021	Slender-horned spineflower (H) ..... Santa Ana River woolly-star (V)	Riversidean Sage Scrub <sup>2</sup> Riversidean Alluvial Fan Sage Scrub <sup>2</sup>
107-101	Slender-horned spineflower (V) ..... Nevin's barberry (M) Santa Ana River woolly-star (V)	Riversidean Sage Scrub <sup>2</sup> Southern Willow Scrub <sup>2</sup> Riversidean Alluvial Fan Sage Scrub <sup>2</sup>
107-121	Slender-horned spineflower (H) ..... Santa Ana River woolly-star (V)	Riversidean Sage Scrub <sup>2</sup> Riversidean Alluvial Fan Sage Scrub <sup>2</sup>
108-081	Santa Ana River woolly-star (V) .....	Riversidean Sage Scrub <sup>2</sup>
122-021	.....	Riversidean Sage Scrub <sup>2</sup>
122-022	.....	Riversidean Sage Scrub
144-021	.....	Riversidean Sage Scrub <sup>2</sup>
144-041	.....	Riversidean Sage Scrub <sup>2</sup>
144-101	.....	Riversidean Sage Scrub
145-241	Cleveland goldenstars (M) Payson's jewelflower (H)	
145-282	.....	Riversidean Sage Scrub <sup>2</sup>
145-321	.....	Riversidean Sage Scrub
146-301	Cleveland goldenstars (M)	
146-321	Cleveland goldenstars (M) .....	Southern Cottonwood-Willow Riparian Forest South Coast Live Oak Riparian Forest <sup>2</sup> Southern Willow Scrub <sup>2</sup>
160-141	Munz's onion (H) ..... Thread-leaved brodiaea (M)	Riversidean Sage Scrub
160-241	.....	Riversidean Sage Scrub <sup>2</sup>
160-281	Munz's onion (H) .....	Riversidean Sage Scrub Southern Willow Scrub
160-321	Munz's onion (M) ..... Many-stemmed dudleya (H)	Southern Willow Scrub Riversidean Sage Scrub
162-221	.....	Riversidean Sage Scrub
162-261	Payson's jewelflower (H) .....	Riversidean Sage Scrub <sup>2</sup>
164-021	.....	South Coast Live Oak Riparian Forest <sup>2</sup> Southern Willow Scrub
164-221	Cleveland goldenstars (M)	
164-351	Cleveland goldenstars (M) .....	South Coast Live Oak Riparian Forest
175-081	Munz's onion (H) ..... Many-stemmed dudleya (H)	South Coast Live Oak Riparian Forest Riversidean Sage Scrub
175-101	.....	Southern Willow Scrub <sup>2</sup> Riversidean Sage Scrub

**Table B-4. Occurrence of Sensitive Plant Species and Natural Communities, (cont.)**

**Riverside-San Bernardino County Management Area**

<b>Parcel No.</b>	<b>Sensitive Plant Species<sup>1</sup></b>	<b>Sensitive Natural Plant Community</b>
175-241	Many-stemmed dudleya (H) . . . . . Munz's onion (H)	Riversidean Sage Scrub <sup>2</sup> Southern Willow Scrub
176-041	Many-stemmed dudleya (H) . . . . . Munz's onion (H)	Southern Willow Scrub <sup>2</sup>
176-141	. . . . .	Riversidean Sage Scrub
176-201	. . . . .	Riversidean Sage Scrub Southern Willow Scrub
176-221	. . . . .	Riversidean Sage Scrub
176-261	California orcutt grass (H) . . . . .	Riversidean Sage Scrub Southern Willow Scrub
176-281	California orcutt grass (M) . . . . .	Riversidean Sage Scrub
176-341	California orcutt grass (M) . . . . .	Southern Willow Scrub Riversidean Sage Scrub
177-181	California orcutt grass (H) . . . . .	Riversidean Sage Scrub
177-301	. . . . .	Riversidean Sage Scrub
179-261	. . . . .	Riversidean Sage Scrub <sup>2</sup>
180-111	. . . . .	Freshwater Seep
180-141	. . . . .	Riversidean Sage Scrub <sup>2</sup>
180-271	Slender-horned spineflower (M) . . . . .	Riversidean Sage Scrub
180-272	. . . . .	Riversidean Sage Scrub <sup>2</sup>
180-281	. . . . .	Riversidean Sage Scrub <sup>2</sup>
180-341	. . . . .	Riversidean Sage Scrub <sup>2</sup> Southern Sycamore-Alder Riparian Woodland South Coast Live Oak Riparian Forest
189-101	. . . . .	Riversidean Sage Scrub
190-301	Payson's jewelflower (M) . . . . .	South Coast Live Oak Riparian Forest
190-302	. . . . .	Riversidean Sage Scrub
190-321	Payson's jewelflower (M) . . . . .	South Coast Live Oak Riparian Forest <sup>2</sup> Southern Willow Scrub <sup>2</sup>
191-041	. . . . .	Riversidean Sage Scrub <sup>2</sup>
191-061	Payson's jewelflower (H) . . . . .	Riversidean Sage Scrub <sup>2</sup>
191-241	. . . . .	Riversidean Sage Scrub
191-242	. . . . .	Riversidean Sage Scrub
192-061	. . . . .	Riversidean Sage Scrub
192-101	. . . . .	Riversidean Sage Scrub <sup>2</sup>

**Table B-4. Occurrence of Sensitive Plant Species and Natural Communities, (cont.)**

**Riverside-San Bernardino County Management Area**

<b>Parcel No.</b>	<b>Sensitive Plant Species<sup>1</sup></b>	<b>Sensitive Natural Plant Community</b>
193-041	.....	Riversidean Sage Scrub <sup>2</sup>
193-101	.....	South Coast Live Oak Riparian Forest <sup>2</sup>
193-181	.....	South Coast Live Oak Riparian Forest <sup>2</sup> Riversidean Sage Scrub
205-121	Payson's jewelflower (M) .....	Southern Willow Scrub <sup>2</sup> Riversidean Sage Scrub <sup>2</sup>
205-321	Nevin's barberry (H) .....	South Coast Live Oak Riparian Forest <sup>2</sup> Southern Cottonwood-Willow Riparian Forest
205-341	Nevin's barberry (V) .....	Riversidean Sage Scrub <sup>2</sup>
	Palmer's grapplehook (V) .....	South Coast Live Oak Riparian Forest <sup>2</sup>
	Payson's jewelflower (V) .....	
206-101	Payson's jewelflower (H) .....	South Coast Live Oak Riparian Forest <sup>2</sup> Southern Willow Scrub
206-121	Payson's jewelflower (H) .....	Southern Willow Scrub <sup>2</sup> South Coast Live Oak Riparian Forest <sup>2</sup>
206-141	Payson's jewelflower (H) .....	South Coast Live Oak Riparian Forest Southern Willow Scrub
206-301	Nevin's barberry (M) .....	Southern Willow Scrub Riversidean Sage Scrub
207-121	.....	Southern Willow Scrub
208-131	Johnson's rock cress (M)	
208-132	Johnson's rock cress (M)	
217-261	.....	Coastal & Valley Freshwater Marsh Southern Sycamore-Alder Riparian Woodland Southern Willow Scrub South Coast Live Oak Riparian Forest
218-231	.....	South Coast Live Oak Riparian Forest <sup>2</sup>
218-261	.....	Diegan Sage Scrub <sup>2</sup> South Coast Live Oak Riparian Forest <sup>2</sup> Southern Willow Scrub <sup>2</sup>
218-331	Many-stemmed dudleya(M) .....	South Coast Live Oak Riparian Forest <sup>2</sup>
	Parry's tetracoccus (V) .....	Southern Willow Scrub <sup>2</sup> Southern Sycamore-Alder Riparian Woodland
219-241	.....	Diegan Sage Scrub
219-291	.....	South Coast Live Oak Riparian Forest <sup>2</sup>
220-041	Payson's jewelflower (V) .....	Diegan Sage Scrub
	Nevin's barberry (H) .....	
220-191	.....	South Coast Live Oak Riparian Forest
220-241	Nevin's barberry (H)	



**Table B-4. Occurrence of Sensitive Plant Species and Natural Communities, (cont.)**

**Riverside-San Bernardino County Management Area**

<b>Parcel No.</b>	<b>Sensitive Plant Species<sup>1</sup></b>	<b>Sensitive Natural Plant Community</b>
221-041	Nevin's barberry (M) ..... Payson's jewelflower (H)	Southern Willow Scrub
221-042	Nevin's barberry (M)	
221-221	.....	South Coast Live Oak Riparian Forest
221-301	Nevin's barberry (M)	
221-332	Nevin's barberry (H) ..... .....	Riversidean Sage Scrub South Coast Live Oak Riparian Forest

**Table B-4. Occurrence of Sensitive Plant Species and Natural Communities, (cont.)**

**Beauty Mountain Management Area**

<b>Parcel No.</b>	<b>Sensitive Plant Species<sup>1</sup></b>	<b>Sensitive Natural Plant Community</b>
221-131	Slender-pod caulanthus(H) Nevin's barberry(M)	
221-231	Slender-pod caulanthus(H) . . . . . Payson's caulanthus (H) San Felipe monardella (H) Nevin's barberry(M)	Southern Willow Scrub
222-221	Slender-pod caulanthus(H) . . . . . Payson's caulanthus (H) San Felipe monardella (H) Narrow-leaved nightshade (M)	South Coast Live Oak Riparian Forest <sup>2</sup> Southern Cottonwood-Willow Riparian Forest
223-221	. . . . .	Diegan Sage Scrub <sup>2</sup>
223-361	. . . . .	Coastal & Valley Freshwater Marsh South Coast Live Oak Riparian Forest Southern Cottonwood-Willow Riparian Forest
232-101	. . . . .	South Coast Live Oak Riparian Forest
232-251	San Felipe monardella (H) . . . . . Narrow-leaved nightshade (M)	Southern Cottonwood-Willow Riparian Forest <sup>2</sup> South Coast Live Oak Riparian Forest <sup>2</sup>
233-101	Payson's caulanthus (H) San Felipe monardella (H)	
233-111	Orcutt's linanthus (H)	
233-121	Orcutt's linanthus (H)	
233-221	Payson's caulanthus (H) . . . . . Orcutt's linanthus (H)	Southern Cottonwood-Willow Riparian Forest <sup>2</sup> South Coast Live Oak Riparian Forest <sup>2</sup>

**Table B-4. Occurrence of Sensitive Plant Species and Natural Communities, (cont.)**

**Los Angeles-Orange County Management Area**

<b>Parcel No.</b>	<b>Sensitive Plant Species<sup>1</sup></b>	<b>Sensitive Natural Plant Community</b>
002-361	.....	Southern Willow Scrub
002-362	Dunn's Mariposa-lily (M)	
003-311	.....	South Coast Live Oak Riparian Forest <sup>2</sup> Southern Cottonwood-Willow Riparian Forest <sup>2</sup> Southern Willow Scrub <sup>2</sup>
011-261	Nevin's barberry (M) ..... San Gabriel Bedstraw (M)	Venturan Coastal Sage Scrub
012-311	Nevin's barberry (M) ..... San Fernando Valley spineflower (M) San Gabriel Bedstraw (M)	Southern Sycamore-Alder Riparian Woodland <sup>2</sup> Venturan Coastal Sage Scrub
016-031	Nevin's barberry (M) ..... .....	Southern Cottonwood-Willow Riparian Forest Venturan Coastal Sage Scrub
017-071	Nevin's barberry (H) ..... San Fernando Valley spineflower (M)	Venturan Coastal Sage Scrub
019-241	.....	Venturan Coastal Sage Scrub
019-273	.....	Southern Willow Scrub
019-331	Nevin's barberry (M) ..... San Fernando Valley spineflower (M)	Venturan Coastal Sage Scrub
019-361	Slender-horned spineflower (H) ..... Nevin's barberry (M) San Fernando Valley spineflower (M)	Southern Cottonwood-Willow Riparian Forest <sup>2</sup> Venturan Coastal Sage Scrub
020-081	.....	Venturan Coastal Sage Scrub
020-131	.....	Riversidean Sage Scrub
020-221	.....	Riversidean Sage Scrub
020-261	.....	Venturan Coastal Sage Scrub
020-271	.....	Venturan Coastal Sage Scrub
022-041	Nevin's barberry (M) San Fernando Valley spineflower (H)	
022-051	Nevin's barberry (M)	
022-061	Brauton's milk vetch (M)	
022-101	Nevin's barberry (M) ..... San Fernando Valley spineflower (M)	Venturan Coastal Sage Scrub
024-121	Nevin's barberry (M) ..... San Fernando Valley spineflower (M)	Venturan Coastal Sage Scrub
024-151	Slender-horned spineflower (M) Nevin's barberry (M) San Fernando Valley spineflower (M)	

**Table B-4. Occurrence of Sensitive Plant Species and Natural Communities, (cont.)**

**Los Angeles-Orange County Management Area**

<b>Parcel No.</b>	<b>Sensitive Plant Species<sup>1</sup></b>	<b>Sensitive Natural Plant Community</b>
025-051	.....	Venturan Coastal Sage Scrub
025-061	Nevin's barberry (M) San Fernando Valley spineflower (M)	
026-021	.....	Riversidean Sage Scrub <sup>2</sup> Southern Willow Scrub <sup>2</sup>
026-041	.....	Riversidean Sage Scrub <sup>2</sup>
026-042	Nevin's barberry (M) ..... San Fernando Valley spineflower (M)	Southern Willow Scrub Southern Cottonwood-Willow Riparian Forest
032-121	.....	South Coast Live Oak Riparian Forest Southern Cottonwood-Willow Riparian Forest
032-122	.....	South Coast Live Oak Riparian Forest Southern Cottonwood-Willow Riparian Forest
033-081	.....	Venturan Coastal Sage Scrub

1. (V) Verified or known historic occurrence.  
(H) High probability of occurrence.  
(M) Moderate probability of occurrence.

2. Considered to be representative, viable samples of this plant community for purposes of this RMP.

# Appendix C

## Areas of Critical Environmental Concern

### Introduction

Areas of Critical Environmental Concern (ACECs) were authorized in Section 202 (c)(3) of the Federal Land Policy and Management Act of 1976 (FLPMA, P.L. 94-579). ACECs are areas where special management attention is needed to protect, and prevent irreparable damage to, important historic, cultural, and scenic values, fish, or wildlife resources or other natural systems or processes; or to protect human life and safety from natural hazards.

The ACEC designation indicates that the BLM recognizes that an area has significant values, and establishes special management measures to protect those values. In addition, designation also serves as a reminder that significant value(s) or resource(s) exist which must be accommodated when future management actions and land use proposals are considered in or near an ACEC.

To be considered as a potential ACEC, an area must meet both the criteria of importance and relevance. A relevant resource is a significant value or resource of a type described above. An important resource is a value, system, process or hazard which has substantial significance and values. For more information on the ACEC designation and process, please refer to BLM Manual 1613--Areas of Critical Environmental Concern.

To be designated as an ACEC, an area must require special management attention to protect the important and relevant values. These are management measures which would not be necessary and prescribed if the critical and important features were not present. That is, they would not be prescribed in the absence of the designation. For each potential ACEC identified in this plan, management prescriptions have been developed and are included in the Land Use Allocation section of each alternative presented in Chapter 2.

In California the following naming configurations are used for grouping.

Group 1. Research Natural Area: A Research Natural Areas (RNA) is a physical and biological unit where natural conditions are maintained insofar as possible, and which is reserved for the primary purpose of research and higher education. These conditions are achieved by allowing ordinary physical and biological processes to operate without human intervention. Management prescriptions are imposed to limit the full range of multiple land uses or allocations. However, under specific conditions, deliberate manipulation intended to maintain the unique features that the ACEC/RNA was designated for may be authorized. RNAs typify important forest, shrub land, grassland, alpine, aquatic, and geologic types or systems in each region; and can also represent unique natural situations which have characteristics or scientific importance and plant communities of limited distribution and research importance, including international research programs such as Man in the Biosphere Reserve system. If proposed land uses conflict with the purposes of an RNA, a withdrawal may be recommended in order to maintain the integrity of the area. Examples of how an RNA will be named are as follows: Reef Ridge RNA, an Area of Critical Environmental Concern, or San Andreas Fault Research Natural Area/National Natural Landmark, an Area of Critical Environmental Concern.

Group 2. Cultural: An area which merits recognition and management beyond that provided through normal resource management for the full range of cultural resources and values. The objective is to manage these areas to conserve the cultural features or values for scientific, education, and/or contemporary ethnic interests. These areas may also be recommended to the National Register of Historic Places or for designation as a National Historic Landmark if they meet the criteria for

eligibility. A naming example is as follows: Fort Piute Cultural Site, an Area of Critical Environmental Concern.

Group 3. Hazard. Areas where there are natural hazards which significantly endanger human life, health, or safety. This includes areas, where human visitation or habitation is likely, such as avalanche areas, soil mantles, areas subject to landslides, seismic areas, cliffs, etc. The objective is to manage these areas to reduce risks to human life, health, or safety; interpret natural phenomena; and/or limit public access if necessary. An example of how an area would be named is as follows: the Hog Hazard Area, an Area of Critical Environmental Concern.

Group 4. Outstanding Natural Area: An Outstanding Natural Area (ONA) is an area of high public interest which contains outstanding natural features or values. The objective is to conserve these features or values while allowing for public use (i.e., general scientific, recreation, interpretation, and education compatible with the objectives and values for establishing the outstanding natural area). It includes areas of geologic, botanic, zoologic, paleontologic, and physiographic interest within the region. These areas may also be recommended for designation as a National Natural Landmark if eligible. The level of management required is generally less restrictive than for a RNA. Typically, there would be a wider range of uses permitted dependent on the values of resources present.

## Interagency Coordination

In considering areas for ACEC designation, the BLM coordinates with other agencies and organizations. The BLM is a member of the California Interagency Natural Areas Coordinating Committee (INACC), which operates under a Memorandum of Understanding signed in 1989. Participating agencies and organizations are BLM, California Department of Fish and Game, California Department of Parks and Recreation, State Lands Commission, University of California Natural Reserve System, National Park Service, U. S. Fish and Wildlife Service, U. S. Forest Service (both Region 5 and the Pacific Southwest Forest and Range Experiment Station, and the Nature Conservancy. The INACC is concerned with the conservation of natural diversity on the States wildlands, including the identification, designation, and management of natural areas.

Under an action plan developed by INACC regional interagency groups have been formed, (or are in the process of being formed) in 11 regions in California. The public lands within the South Coast RMP fall mostly in the South Coast Region of INACC. The Bureau has participated in a large workshop and several smaller meetings of the South Coast Regional INACC, and has coordinated the actions proposed in the South Coast RMP with this group. The Bureau is committed to the conservation of the State's justly famous natural diversity and to playing a large role in contributing to the State's system of natural areas.

## Areas Considered for ACEC Designation

The seven areas which have been evaluated for possible ACEC values and considered for ACEC designation in the RMP are briefly discussed below.

### Cedar Canyon

The Cedar Canyon ACEC would encompass approximately 705 acres of public lands and 280 acres of private lands targeted for acquisition. Most of Cedar Canyon, on the northeastern flank of Otay Mountain, would be within the ACEC boundaries. This canyon contains the only known population of Mexican flannel bush (*Fremontodendron mexicanus*), a shrub or small tree listed by the State of California as rare, and a candidate species for federal listing as threatened or endangered. Approximately forty specimens of that species are known to occur within the canyon. According to Beauchamp (personal communication), that population is the only one known for that species in the world. Cedar Canyon also contains pristine stands of riparian woodlands, as well as stands of Tecate cypress, a candidate species for federal listing as threatened or endangered.

Rapid development of the private lands immediately to the north of Cedar Canyon, and easier access provided by the subdivision of what used to be large ranches in the vicinity, will likely result in increased impact levels from recreation, accidental fires, and off-road vehicle traffic. The designation of Cedar Canyon as an ACEC/RNA as identified in Alternatives 3 and 4 would provide the necessary management attention it will need in the future if its sensitive natural resources are to be conserved.

## **Johnson Canyon**

The ACEC would include a total of 1,150 acres. This area is currently under Recreation and Public Purposes lease and is used by the Systems Ecology Research Group of San Diego State University (SDSU) for research and educational purposes. The relatively small area ranges in elevation from over 6,000 to under 4,600 feet, and contains a unique diversity of vegetation including Coulter pine forest in the upper reaches and mixtures of both chamise and red shank chaparral at lower elevations.

Opportunities for research on chaparral management in particular and on mediterranean ecosystems in general are needed, but are increasingly being lost due to development. The unique opportunity for research within the ACEC can be found at few other locations. The need to protect this unique area from uses incompatible with its sensitive resources and principle use as an outdoor classroom and field biology research necessitate special management considerations and planning. In view of the values associated with the area it is considered for designation as a ACEC/RNA in Alternatives 3 and 4.

## **Kuchamaa**

The importance of Tecate Peak (Kuchamaa), and Little Tecate Peak, lies in their extreme religious and spiritual importance to the Kumeyaay People. In particular, Kuchamaa holds special significance because "it is where the shamans obtained their power and knowledge" (Robertson 1982), and where initiates were brought into the Shaman (spiritual/religious) order. Since time immemorial to the present day these mountains have also served as places to hold sacred dances, ceremonies, ancient sacramental acts, and to receive healing and spiritual cleansing.

These mountains also act today as a cultural link with the Kumeyaay ethnic past and their religious heritage. Parallels have been drawn comparing the Native American view of Kuchamaa to the Christian respect for a cathedral, as both represent places of great religious importance.

Contemporary use of Kuchamaa is different from that of the past; whereas formerly only shamans were allowed on Kuchamaa, today a wide range of Native Americans visit the peak (Lobo 1982b). Religious practices have diversified, though not lessened in importance, and are not strictly limited to shamanistic rites. As a result of the strong Native American religious values held for Kuchamaa, the mountain has been recently nominated to the National Register of Historic Places.

There is a threat that individuals might unknowingly perform sacrilegious acts such as off-road driving, rock-hounding, hunting, or drawing graffiti on these mountains. As a result, Kuchamaa and Little Tecate Peak are worthy of special management attention, and are identified for ACEC designation in both Alternatives 3 and 4.

## **Million Dollar Spring**

Approximately 5,830 acres of public lands within the eastern part of the Beauty Mountain WSA are considered for the status of ACEC/ONA. The ACEC designation would be made under Alternative 3 in recognition of the fragile soils (Knecht, 1917) that underlay one of the largest single pristine watersheds found on public lands within the South Coast Area. This watershed includes three perennial springs and approximately 300 acres of South Coast Live Oak Riparian Forest and Southern Cottonwood-Willow Riparian Forest, two communities considered rare by Holland (1986). All have significant values for wildlife management.

Designation of the core watershed area would provide for the conservation of its sensitive natural resources, and to maintain its viability as a locally important water source while increasing public access, promoting game species, enhancing recreational activities, and supporting moderate levels of livestock grazing.

### **Santa Ana River Wash**

The ACEC would encompass 755 acres of public lands north of Redlands within the flood-plains of the Santa Ana River and Plunge Creek. It would provide for enhanced protection of the sensitive habitats for, and populations of, two federally-listed plant species: the Santa Ana River woolly-star (*Eriastrum densifolium* ssp. *sanctorum*) and the slender-horned spineflower (*Dodecahema leptoceras*).

The ACEC/RNA status is considered to provide special management of the area for the conservation and recovery of these two very rare species. Rapid urban development of the surrounding area and high demand for sand and gravel mining within the floodplain of the Santa Ana River put extreme land-use pressures on these public lands and may be detrimental to the two endangered species. ACEC status would provide the framework within which the resolution of these demands and the conservation of these species in their natural habitat could be achieved. It may also provide the basis upon which a regional conservation plan for these species, involving other agencies and land owners, would be implemented.

### **Santa Margarita Reserve**

The Santa Margarita Ecological Reserve (SMER) is administered by the Systems Ecology Research Group of San Diego State University (SDSU) and is used primarily for research and educational purposes. The reserve is a tract of about 2,700 acres acquired by the State of California and presently designated for use by the California State Colleges as a field biology research area. Presently SDSU also administers approximately 1,230 acres of public lands under a Memorandum of Understanding with the Bureau of Land Management. The combined BLM/SDSU holdings in the reserve make it one of the largest public holdings of coastal wildlands in southern California for research and educational purposes. In addition to occupied summer habitat for Least Bell's Vireo (a federally-endangered species), the preserve also includes significant stands of pristine deer grass (*Muhlenbergia rigens*), and habitat for species such as the orange-throated whiptail, southwestern pond turtle, and sticky dudleya (*Dudleya viscida*), all of which are candidates for federal listing as endangered or threatened. The need to protect this unique area from uses incompatible with its sensitive resources and ensure its principle use as an outdoor classroom and field biology research site necessitate special management considerations and planning. In view of the values associated with the area, it is considered for designation as an ACEC/RNA in Alternatives 3 and 4.

### **Steele Peak**

The Steele Peak Reserve contains 16 percent of the known Stephens' kangaroo rat (SKR) habitat within study areas delineated in the SKR Habitat Conservation Plan (HCP). This 11,688-acre area is connected to the University of California's Motte Reserve (which is also one of the SKR Study Areas delineated in the SKR HCP). In addition to providing a major habitat reserve area for the Stephens' kangaroo rat (a federally listed endangered species), the reserve area also supports species such as the orange-throated whiptail, California Gnatcatcher, and Palmer's grapplinghook, all of which are all federal category 2 candidates for listing as either threatened or endangered. Other potentially conflicting activities such as sheep grazing, shooting and sport hunting, and OHV use also occur within this area. Due to the nationally significant sensitive resources involved and the potentially conflicting uses of this area, the Steele Peak Reserve fulfills both the relevance and importance criteria needed to be designated as an Area of Critical Environmental Concern. This combined with the fact that the area also fulfills the criteria of a Research Natural Area, supports the designation of this area as a ACEC/RNA in Alternatives 3 and 4.



# Appendix D

## Oil and Gas Lease Stipulations

Some stipulations and restrictions will apply to certain oil and gas leasing activities in the planning area. They do not dictate non-mineral related surface management on private lands and private mineral estates but are intended to provide protection of important resources that otherwise may be impacted by federal actions. Areas with potential for federal oil and gas lease that are covered by the following stipulations are described in Chapter 2. When applications for permit to drill (APDs) or other surface uses are submitted, negotiations between the surface owner, operator, and BLM may be undertaken to incorporate specific rights of the surface owner.

Many controls and restrictions of oil and gas exploration and development activities are standard operating procedures based on regulations, onshore oil and gas orders and standard lease terms (BLM Form 3100-11). These controls and restrictions automatically become conditions of approval when permits for exploration and development activities are issued. Examples of conditions of approval are riparian zone setbacks of 200 meters or less and mandatory protection of cultural resources.

Stipulations are added provisions that modify standard lease rights and are attached to and made part of the lease. There are three categories of lease stipulations; no surface occupancy, timing limitation and controlled surface use, as defined below.

**No Surface Occupancy (NSO)** - Use or occupancy of the land surface for fluid mineral exploration or development is prohibited to protect identified resource values.

**Timing Limitation (Seasonal Restriction)** - Prohibits surface use during specified time periods to protect identified resource values.

**Controlled Surface Use (CSU)** - Use and occupancy is allowed (unless restricted by another stipulation), but identified resource values require special operational constraints that may modify the lease rights.

There is also provision for special or unique stipulations, such as those required by prior agreements between agencies.

For each stipulation there are standards for exception, modification and waiver:

**Exception** - Case-by-case exemption from a lease stipulation. The stipulation continues to apply to all other sites within the leasehold to which the restrictive criteria applies.

**Modification** - Fundamental change to the provisions of a lease stipulation, either temporarily or for the term of the lease. A modification may, therefore, include an exemption form or alteration to a stipulated requirement. Depending on the specific modification, the stipulation may or may not apply to all other sites within the leasehold to which the restrictive criteria applied.

**Waiver** - Permanent exemption from a lease stipulation. The stipulation no longer applies anywhere within the leasehold.

## Lease Stipulations

The following stipulations appear in one or more of the management area alternatives developed for the draft resource management plan.

### Least Bell's Vireo NSO

No surface occupancy will be allowed within 1/4 mile of riparian areas with potential as Least Bell's Vireo nesting habitat. Approximately \_\_\_ per cent of the lease area is covered by the stipulation.

Resource: Riparian areas with potential as Least Bell's Vireo nesting habitat.

Objective: To protect nesting sites of Least Bell's Vireo, a species federally listed as endangered and listed by the State of California as endangered.

Exception: An exception may be granted if BLM determines that the proposed action will not affect the Least Bell's Vireo or its habitat. If BLM determines the action will have an adverse effect, the operator may submit a plan demonstrating that the impacts can be mitigated. This plan must be approved by BLM in consultation with the U. S. Fish and Wildlife Service (USF&WS) and conference with the California Department of Fish and Game (CDF&G).

Modification: The boundaries of the stipulated areas may be modified if the authorized officer, in consultation with the USF&WS and conference with CDF&G, determines that such portion of the riparian area does not include Least Bell's Vireo nesting habitat.

Waiver: This stipulation may be waived if the authorized officer, in consultation with the USF&WS and conference with CDF&G, determines that none of the riparian areas within the leasehold include Least Bell's vireo nesting habitat.

### Stephens' Kangaroo Rat NSO

No surface occupancy will be allowed within a setback of 200 meters of any areas occupied by Stephens' kangaroo rat. Approximately \_\_\_ per cent of the lease area is covered by the stipulation.

Resource: Habitat of Stephens' kangaroo rat.

Objective: To protect habitat of Stephens' kangaroo rat, a species federally listed as endangered and listed by the State of California as threatened.

Exception: An exception may be granted if BLM determines that the proposed action will not affect the Stephens' kangaroo rats or their habitat. If BLM determines the action will have an adverse effect, the operator may submit a plan demonstrating that the impacts can be mitigated. This plan must be approved by BLM in consultation with the U. S. Fish and Wildlife Service (USF&WS) and conference with the California Department of Fish and Game (CDF&G).

Modification: The boundaries of the stipulated areas may be modified if the authorized officer, in consultation with the USF&WS and conference with CDF&G, determines that protection of such area is not critical to Stephens' kangaroo rats.

Waiver: This stipulation may be waived for the entire lease area if the authorized officer, in consultation with the USF&WS and conference with CDF&G, determines that the area protected by the stipulation is no longer habitat for Stephens; kangaroo rat. or the Stephens' kangaroo rat is declared recovered and NSO is no longer needed to protect its habitat.

### Unarmored Three-spined Stickleback NSO

No surface occupancy will be allowed within 1/4 mile of portions of the Santa Clara River identified as unarmored three-spined stickleback habitat. Approximately \_\_\_ per cent of the lease area is covered by the stipulation.

Resource: Habitat of unarmored three-spined stickleback habitat.

Objective: To prevent degradation of the habitat of unarmored three-spined stickleback, a species federally listed as endangered and listed by the State of California as endangered.

Exception: An exception may be granted if BLM determines that the proposed action will not affect the unarmored three-spined stickleback or its habitat. If BLM determines the action will have an adverse effect,

the operator may submit a plan demonstrating that the impacts can be mitigated. This plan must be approved by BLM in consultation with the U. S. Fish and Wildlife Service (USF&WS) and conference with the California Department of Fish and Game (CDF&G).

Modification: The boundaries of the stipulated areas may be modified if the authorized officer, in consultation with the USF&WS and conference with CDF&G, determines that protection of such area is not critical to the unarmored three-spined stickleback.

Waiver: This stipulation may be waived for the entire lease area if the authorized officer, in consultation with the USF&WS and conference with CDF&G, determines that the area protected by the stipulation is no longer habitat for unarmored three-spined stickleback or that unarmored three-spined stickleback is declared recovered and NSO is no longer needed to protect its habitat.

#### **Unarmored Three-spined Stickleback CSU**

Prior to surface disturbance of areas within the identified zone of influence, a surface use/oil spill contingency plan must be submitted to the authorized officer that demonstrates the following:

- Accidental spills will be contained on-site.
- On-site and off-site areas will be adequately protected from accelerated erosion; such as sheet rilling, gullying and landsliding.

Resource: Habitat of unarmored three-spined stickleback habitat.

Objective: To prevent degradation of the habitat of unarmored three-spined stickleback, a species federally listed as endangered and listed by the State of California as endangered.

Exception: None.

Modification: None.

Waiver: This stipulation may be waived for the entire lease area if the authorized officer, in consultation with the U. S. Fish and Wildlife Service (USF&WS) and conference with the California Department of Fish and Game (CDF&G), determines that the area protected by the stipulation is no longer habitat for unarmored three-spined stickleback or that unarmored three-spined stickleback is declared recovered and such protection is no longer needed.

#### **Slender-horned spineflower NSO**

No surface occupancy is allowed within the identified habitat of slender-horned spineflower. Approximately \_\_\_ per cent of the lease area is covered by the stipulation.

Resource: Habitat of slender-horned Spineflower.

Objective: To protect the habitat of slender-horned spineflower, a species federally listed as endangered and listed by the State of California as endangered.

Exception: An exception may be granted if BLM determines that the proposed action will not affect the Slender-horned spineflower or its habitat. If BLM determines the action will have an adverse effect, the operator may submit a plan demonstrating that the impacts can be mitigated. This plan must be approved by BLM in consultation with the U. S. Fish and Wildlife Service (USF&WS) and conference with the California Department of Fish and Game (CDF&G).

Modification: The boundaries of the stipulated areas may be modified if the authorized officer, in consultation with the USF&WS and conference with CDF&G, determines that such area does not include slender-horned spineflower or its habitat.

Waiver: This stipulation may be waived if the authorized officer, in consultation with the USF&WS and conference with CDF&G, determines that none of the leasehold includes slender-horned spineflower or its habitat.

#### **California Gnatcatcher NSO**

No surface occupancy will be allowed within 1/4 mile of areas identified as California Gnatcatcher nesting sites within the previous five years. Approximately \_\_\_ per cent of the lease area is covered by the stipulation.

Resource: California Gnatcatcher nesting habitat.

Objective: To protect nesting sites of California Gnatcatcher, a species which is a candidate for federal listing as threatened or endangered.

Exception: An exception may be granted if the lessee/operator submits a plan to the authorized officer, demonstrating that impacts to the California Gnatcatcher from the proposed action would not occur, are acceptable or would be adequately mitigated. This plan must be approved by BLM.

Modification: The boundaries of the stipulated areas may be modified if the authorized officer determines that such area does not include California Gnatcatcher nesting habitat or that such habitat area is not integral to the California Gnatcatcher.

Waiver: This stipulation may be waived if the authorized officer, determines that none of the area within the leasehold includes California Gnatcatcher nesting habitat.

#### **Coastal Sage Scrub NSO**

No surface occupancy will be allowed in areas represented by 30 acres or more of undisturbed coastal sage scrub vegetation. Approximately \_\_\_\_ per cent of the lease area is covered by the stipulation.

Resource: Habitat of California Gnatcatcher and orange-throated whiptail.

Objective: To prevent degradation of the habitat of California Gnatcatcher and orange-throated whiptail, species which are candidates for federal listing as threatened or endangered.

Exception: An exception may be granted if the lessee/operator submits a plan to the authorized officer, demonstrating that impacts to the California Gnatcatcher and/or orange-throated whiptail from the proposed action would not occur, are acceptable or would be adequately mitigated. This plan must be approved by BLM.

Modification: The boundaries of the stipulated areas may be modified if the authorized officer determines that such area does not include either California Gnatcatcher or orange-throated whiptail habitat.

Waiver: This stipulation may be waived if the authorized officer determines that none of the leasehold includes either California or orange-throated whiptail habitat.

### **Lease Notices**

In addition to stipulations, notices may be attached to leases in order to transmit information at the time of lease issuance to assist the lessee in submitting acceptable surface use plans, or to assist in the administration of leases. Lease notices alone do not involve new restrictions or requirements. Any requirements contained within a lease notice are supported by either law, regulations, standard lease terms, or onshore oil and gas orders.

The following notice will be applied to all new leases within areas identified as habitat for species which are State-listed and /or are candidates for federal listing as threatened or endangered.

#### **Lease Notice Protection of State-Listed and Federal Candidate Species**

The leased lands are in an area suitable for the habitat of the following species which are candidates for federal listing as threatened or endangered and/or are listed by the State of California as rare, threatened or endangered:

*(Species are those identified as potentially occurring on public lands as presented in Tables B-1 and B-2 in Appendix B.)*

All viable habitat will be identified during environmental review of the proposed plan of operation. If field examination indicates that habitat one or more of these species is present, BLM will determine whether or not the species would be affected by the proposed activity. If the species would be affected, conference and/or consultation with CDF&G and USF&WS would be undertaken as appropriate in accordance with BLM Manual 6840. This may require additional time to process the lessee's/operator's proposal, and may result in restrictions to the proposed operations, including denial of surface disturbance in habitat areas or requirements to compensate for habitat loss.

# Appendix E

## Wild and Scenic River Guidelines

### Introduction

This appendix presents the results of the eligibility study for potential additions to the National Wild and Scenic Rivers System, conducted as part of the planning effort. In addition, management guidelines for eligible river segments are presented.

### Wild and Scenic Rivers Eligibility Study

#### Background

The BLM is mandated to evaluate potential additions to the National Wild and Scenic Rivers System (NWSRS) by Section 5(d) of the Wild and Scenic Rivers Act (WSRA) during the Resource Management Plan (RMP) process. NWSRS study guidelines are found in BLM Manual 8351; U.S. Departments of Agriculture and Interior guidelines published in Federal Register Vol. 7, No. 173, September 7, 1982; and in various BLM memoranda and policy statements.

The NWSRS study process has three distinct steps:

1. Determine what rivers or river segments are eligible for NWSRS designation.
2. Determine the potential classification of eligible river segments as wild, scenic, recreational, or any combination thereof.
3. Conduct a suitability study/legislative EIS to determine if the river segments are suitable for designation to the NWSRS.

Any river found to be eligible for inclusion in the NWSRS will result in the associated BLM-administered lands within 1/4 mile of the river to be managed as if the river were an actual component of the NWSRS until the suitability issue is resolved.

If a river is found to be suitable for inclusion into the NWSRS, Congress must then pass legislation designating the river before it is added into the system. The State of California can also include the river as a State-designated Wild & Scenic River and then apply to the Secretary of Interior for its inclusion into the NWSRS.

Because of the demands of the South Coast RMP schedule, only the eligibility and classification portion of the wild and scenic study process will be completed in this RMP. The remaining step will be completed in a separate RMP Plan amendment/EIS, or during other agency planning efforts.

The WSRA states that to be eligible for inclusion in the NWSRS, a river or river segment must be free-flowing and with its immediate environment, must possess one or more outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values.

Free-flowing, as defined in Section 16(b) of the WSRA, means "existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic river system shall not automatically bar its

consideration for such inclusion." A river may flow between large impoundments and may qualify if conditions within the segments already in the NWSRS which are downstream from or between major dams which severely regulate and diminish the flow of water in the effected segments. Some examples are: the Trinity River, Klamath River, and Tuolumne River in California, the Snake River in Idaho, and the Deschutes River in Oregon. Some of these rivers have had certain types of recreation enhanced by the water flow regulation of these dams.

Examples of designated rivers with substantial diversions within the NWSRS segment, at the time of designation, include the North Fork Kern River and upper Merced River, both in the California Sierra. There are no minimum flow requirements for inclusion into the NWSRS.

There are no minimum river segment lengths in the NWSRS. Congress has designated a segment as short as 4.25 miles. Considerations in defining study segments include substantial changes in land ownership, physical changes in the river and its surrounding land characteristics, and the type and amount of modern human modification.

The term "outstandingly remarkable" is not clearly defined in the WSRA; consequently the determination of what constitutes "outstandingly remarkable" is left to the professional judgement of the managing agencies and their staffs. Outstandingly remarkable means something which is more than ordinary when considered within a regional (Resource Area wide) context. In order for the river to be considered eligible in this study, the outstandingly remarkable value(s) must occur on BLM administered public lands within 1/4 mile of the river.

Some examples of outstandingly remarkable values are as follows: scenic quality rating of "A" (BLM Manual 8400 Visual Resource Management-Scenic Quality); threatened or endangered species critical habitat; physiographical, biological, recreational, geological, or ecological type locations (exemplar); and areas which are very natural or primitive in character, showing little, if any, evidence of modern human modification, and which may be very rugged and physically challenging to travel through.

The description of river study corridors may include segments that have no present BLM administered lands adjoining them. This study does not offer any eligibility conclusions in these instances. Segments or corridors deemed ineligible in this study because of lack of outstandingly remarkable values on BLM administered lands, may have outstandingly remarkable values on non-BLM lands. In both these instances, BLM defers to other appropriate Federal and State agencies to (re)evaluate these segments and corridors. BLM would participate in any joint studies with the responsible agency(s), as appropriate.

## **River Segments Considered**

Two rivers were considered for potential eligibility into the National Wild and Scenic Rivers System: the San Luis Rey River and the Santa Margarita River.

The San Luis Rey River was eliminated from further consideration on the basis that 1) it had failed to pass the National Park Service's Phase II evaluation for inclusion onto the National Rivers Inventory; and 2) a review of available data failed to reveal any outstandingly remarkable values on lands administered by the Bureau of Land Management.

### **Santa Margarita River**

**Description of River Segment.** The Santa Margarita River is the only essentially undeveloped, natural, and free-flowing river which reaches the sea in the southern California coastal area. From it's origin at the confluence of Murrieta and Temecula Creeks, near Interstate Highway 15 in the southwest corner of Riverside County, the Santa Margarita travels through the wild Temecula Gorge, across miles of lands without roads or trails, through the State's Santa Margarita Ecological Reserve,

across two parcels of public land administered by the Bureau of Land Management, over private lands, and through Camp Joseph E. Pendleton Marine Corps Base, and into the Pacific Ocean, just north of Oceanside. The total river length is 29.6 miles, and all is unmodified and unimpounded except for a distance of several miles in Camp Pendleton, where O'Neill Lake and two percolation basins (impoundment reservoirs) have been developed. All river segments managed by the BLM are natural and free-flowing, and possess "outstandingly remarkable" (i.e. Class A) scenic quality.

**River Length and Jurisdiction.** The Bureau of Land Management manages three segments of the Santa Margarita River, totalling 1.15 miles. This is approximately 3.9% of the total river length. Approximately 140 acres (1.5%) of BLM-managed lands lie within the river corridor, which extends 1/4 mile on either side of the river itself.

**Reasons for Consideration.** The Santa Margarita River was considered eligible for inclusion in the National Wild and Scenic Rivers System because of values identified by the BLM during development of the South Coast Resource Management Plan. During this effort, strong local support was demonstrated for its protection, and the National Park Service indicated an interest in adding the Santa Margarita River to the National Rivers Inventory for later study.

**Outstandingly Remarkable Values.** The three river segments on BLM lands all contain outstandingly remarkable scenic values (Class "A" scenic quality), as measured by methods outlined in BLM 8400 (Scenic Quality) Manual. In addition, the very presence of a free-flowing stream in the southern California coastal area is considered by the Bureau to be outstandingly remarkable. Bureau lands within the river corridor also possess outstandingly remarkable botanic values. Three sensitive plant communities, South Coast Riparian Forest, Southern Willow Scrub, and Diegan Sage Scrub are present, and are considered rare by the California Department of Fish and Game. Also, two Candidate 2 plant species, many-stemmed dudleya (*Dudleya multicaulus*) and Parry's tetracoccus (*Tetracoccus dioicus*), are found on the Bureau parcels.

Sensitive wildlife species are associated with all parts of the river corridor, including the river, its estuary and the adjacent Diegan Sage Scrub. A major population of Least Bell's Vireo (federally-listed as endangered) occurs within the Santa Margarita River drainage in the Camp Pendleton Marine Corps Base and there may be Least Bell's Vireo on BLM-administered lands upstream. Stephens' kangaroo rat, federally listed as endangered, and two candidates for federal listing, the orange-throated whiptail and California Gnatcatcher, are associated with the Diegan Sage Scrub habitat adjacent to the river. All three of these species are likely to occur on BLM-administered land within the river corridor but have not yet been recorded there. The river estuary supports three endangered bird species, including one of California's largest breeding colonies of Least Terns, small groups of Light-footed Clapper Rails and California Brown Pelicans. Wintering Bald Eagles have been recorded along the river's course, but the impounded waters preferred by Bald Eagles are located on the Camp Pendleton Marine Corps Base.

Of particular interest is the presence of beavers along the Santa Margarita River. Beaver ponds were observed on BLM-administered lands along the Santa Margarita River in 1989.

**Potential Classification.** Based upon review of all available data, and review of videotape footage of the river segments crossing BLM lands, the classification of "wild river" potential has been made. Until congress designates the river as a unit of the NWSRS, or a suitability study is completed which finds the BLM river segments to not be suitable for inclusion into the NWSRS, Bureau lands within the river corridor will be managed according to interim protection measures for wild rivers. The management objectives for wild rivers should give primary emphasis to protecting the values which make it outstandingly remarkable while providing river-related outdoor recreation opportunities in a primitive setting. Non-Bureau administered lands are not affected by these interim protection measures.

**Eligibility Determination.** As a result of this eligibility study, those segments of the Santa Margarita River administered by the Bureau of Land Management are found to be eligible for inclusion into the NWSRS. The suitability study will be deferred until after completion of this Resource Management Plan, and then the study will be conducted in coordination with other land managing interests.

## **Management Guidelines and Standards for National Wild and Scenic Rivers**

The Wild and Scenic Rivers Act (Public Law 90-542 as amended) established a method of providing federal protection for certain of our remaining free-flowing rivers, and preserving them and their immediate environments for the use and enjoyment of present and future generations. Rivers are included in the system so that they may benefit from the protective management and control of development for which the Act provides. The following guidelines and standards are summarized from the February 3, 1970, and August 26, 1982, joint Department of the Interior and Department of Agriculture guidelines. They are intended to apply to formally designated rivers through incorporation in formal management plans which are normally developed within three years of designation. The guidelines also apply, on an interim basis to designated rivers prior to management plan approval and to study rivers, and rivers or river segments which have been found to be eligible for consideration as components of the National Wild and Scenic River system through the Bureau's land use planning process. For the sake of clarity, the guidelines are presented for each separate river classification (wild, scenic and recreational river areas). Section 10(a) of the Act states that:

"Each component of the National Wild and Scenic Rivers System shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration, primary emphasis shall be given to protecting its esthetic, scenic, historic, archaeological, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area."

This section is interpreted by the Secretaries of the Interior and Agriculture as stating a nondegradation and enhancement policy for all designated river areas, regardless of classification.

### **Wild Rivers**

Wild river areas are defined by the Act to include "Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America."

#### **Management Objective for Wild River Areas**

Management of wild river areas should give primary emphasis to protecting the values which make it outstandingly remarkable while providing river-related outdoor recreation opportunities in a primitive setting.

#### **Management Standards for Wild River Areas**

Allowable management practices might include construction of minor structures for such purposes as improvement of fish and game habitat, grazing, protection from fire, insects, or disease, and rehabilitation or stabilization of damaged resources, provided the area will remain natural-appearing and the practices or structures will harmonize with the environment. Developments such as trail bridges, occasional fencing, natural-appearing water diversions, ditches, flow measurement or other



water management devices, and similar facilities may be permitted if they are unobtrusive and do not have a significant direct and adverse effect on the natural character of the river area. The following program management standards apply:

- a. Forestry Practices - Cutting of trees will not be permitted except when needed in association with a primitive recreation experience (such as clearing for trails and for visitor safety or to protect the environment (such as control of fire). Timber outside the boundary, but within the visual corridors should, where feasible, be managed and harvested in a manner to provide special emphasis to visual quality.
- b. Water Quality - Water quality will be maintained or improved to meet federal criteria or federally approved state standards. (River management plans shall prescribe a process for monitoring water quality on a continuing basis.)
- c. Hydroelectric Power and Water Resource Development - No development of hydroelectric power facilities would be permitted. No new flood control dams, levees, or other works are allowed in the channel or river corridor. All water supply dams and major diversions are prohibited. The natural appearance and essentially primitive character of the river area must be maintained. Federal agency groundwater development for range, wildlife, recreation or administrative facilities may be permitted if there are no adverse affects on outstandingly remarkable river related values.
- d. Mining - New mining claims and mineral leases are prohibited within 1/4 mile of the river. Valid existing claims would not be abrogated and, subject to existing regulations (e.g., 43 CFR 3809) and any future regulations that the Secretary of the Interior may prescribe to protect the rivers included in the National System, existing mining activity would be allowed to continue. All mineral activity on federally administered land must be conducted in a manner that minimizes surface disturbance, water sedimentation, pollution, and visual impairment. Reasonable mining claim and mineral lease access will be permitted. Mining claims beyond 1/4 mile of the river, but within the wild river area boundary, and perfected after the effective date of the wild river designation can be patented only as to the mineral estate and not the surface estate.
- e. Road and Trail Construction - No new roads or other provisions for overland motorized travel would be permitted within a narrow incised river valley or, if the river valley is broad, within 1/4 mile of the river bank. A few inconspicuous roads leading to the boundary of the river area and unobtrusive trail bridges may be permitted.
- f. Agricultural Practices and Livestock Grazing - Agricultural use is restricted to a limited amount of domestic livestock grazing and hay production to the extent currently being practiced. Row crops are prohibited.
- g. Recreation Facilities - Major public-use areas, such as campgrounds, interpretive centers, or administrative headquarters are located outside wild river areas. Simple comfort and convenience facilities, such as toilets, tables, fireplaces, shelters and refuse containers may be provided as necessary within the river area. These should harmonize with the surroundings. Unobtrusive hiking and horseback riding trail bridges could be allowed on tributaries, but would not normally cross the designated river.
- h. Public Use and Access - Recreation use including, but not limited to, hiking, fishing, hunting and boating is encouraged in wild river areas to the extent consistent with the protection of the river environment. Public use and access may be regulated and distributed where necessary to protect and enhance wild river values.

- i. Rights-of-Way - New transmission lines, natural gas lines, water lines, etc., are discouraged unless specifically prohibited outright by other plans, orders or laws. Where no reasonable alternative exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are unavoidable, locations and construction techniques will be selected to minimize adverse effects on wild river area related values and fully evaluated during the site selection process.
- j. Motorized Travel - Motorized travel on land or water could be permitted, but is it generally not compatible with this river classification. Normally, motorized use will be prohibited in a wild river area. Prescriptions for management of motorized use may allow for search and rescue and other emergency situations.

## **Scenic River Areas**

Scenic river areas are defined by the Act to be "Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads."

### **Management Objective for Scenic River Areas**

Management of scenic river areas should maintain and provide outdoor recreation opportunities in a near-natural setting. The basic distinctions between a "wild" and a "scenic" river area are the degree of development, types of land use, and road accessibility. In general, a wide range of agricultural, water management, silvicultural and other practices could be compatible with scenic river values, providing such practices are carried in such a way that there is not substantial adverse effect on the river and its immediate environment.

### **Management Standards for Scenic River Areas**

The same considerations set forth for wild river areas should be considered, except that motorized vehicle use may, in some cases, be appropriate and that development of larger scale public-use facilities within the river area, such as moderate-sized campgrounds, interpretive centers, or administrative headquarters would be compatible if such facilities were screened from the river. The following program management standards apply:

- a. Forest Practices - Silvicultural practices including timber harvesting could be allowed provided that such practices are carried on in such a way that there is no substantial adverse effect on the river and its immediate environment. The river area should be maintained in its near-natural condition. Timber outside the boundary, but within the visual seen area, should be managed and harvested in a manner which provides special emphasis on visual quality. Preferably, reestablishment of tree cover would be through natural revegetation. Cutting of dead and down materials for fuelwood will be limited. Where necessary, restrictions on use of wood for fuel may be prescribed.
- b. Water Quality - Water quality will be maintained or improved to meet federal criteria or federally-approved state standards. (River management plans shall prescribe a process for monitoring water quality on a continuing basis.)
- c. Hydroelectric Power and Water Resource Development - No development of hydroelectric power facilities would be permitted. Flood control dams and levees would be prohibited. All water supply dams and major diversions are prohibited. Maintenance of existing facilities and construction of some new structures would be permitted provided that the area remains natural in appearance and the practices or structures harmonize with the surrounding

environment

- d. Mining - Subject to existing regulations (e.g., 43 CFR 3809) and any future regulations that the Secretary of the Interior may prescribe to protect the values of rivers included in the National System, new mining claims allowed and mineral leases can be allowed. All mineral activity on federally administered land must be conducted in a manner that minimizes surface disturbance, water sedimentation and pollution, and visual impairment. Reasonable mining claim and mineral lease access will be permitted. Mining claims within the scenic river area boundary perfected after the effective date of designation can be patented only as to the mineral estate and not the surface estate.
- e. Road and Trail Construction - Roads may occasionally bridge the river and short stretches of conspicuous or long stretches of inconspicuous and well-screened roads would be allowed. Maintenance of existing roads and any new roads will be based on the type of use for which the roads are constructed and the type of use that will occur in the river area.
- f. Agricultural Practices and Livestock Grazing - In comparison to wild river areas, a wider range of agricultural and livestock grazing uses is permitted to the extent currently practiced. Row crops are not considered as an intrusion of a the "largely primitive" nature of scenic corridors as long as there is not a substantial adverse effect on the natural-like appearance of the river area.
- g. Recreation Facilities - Larger-scale public use facilities, such as moderate-sized campgrounds, interpretive centers, or administrative headquarters are allowed if such facilities are screened from the river.
- h. Public Use and Access - Recreation use including, but not limited to, hiking, fishing, hunting and boating is encouraged in scenic areas to the extent consistent with the protection of the river environment. Public use and access may be regulated and distributed where necessary to protect and enhance scenic river values.
- i. Rights-of-Way - New transmission lines, natural gas lines, water lines, etc., are discouraged unless specifically prohibited outright by other plans, orders of laws. Where no reasonable alternative exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are unavoidable, locations and construction techniques will be selected to minimize adverse effects on scenic river area related values and fully evaluated during the site selection process.
- j. Motorized Travel - Motorized travel on land or water could be permitted, prohibited or restricted to protect river values. Prescriptions for management of motorized use may allow for search and rescue and other emergency situations.

## **Recreational River Areas**

Recreational river areas are defined by the Act to be "Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some development along their shorelines, and that may have undergone some impoundment or diversion in the past."

### **Management Objective for Recreational River Areas**

Management of recreational river areas should be designed to protect and enhance existing recreational values. The primary objective will be to provide opportunities for the public to participate in recreation activities dependent on or enhanced by the largely free-flowing nature of the river.

## Management Standards for Recreational River Areas

Recreation facilities may be established in proximity to the river, although recreational river classification does not require extensive recreational developments. Recreational facilities may still be kept to a minimum, with visitor services provided outside the river area. Future construction of impoundments, diversions, straightening, rip-rapping, and other modification of the waterway or adjacent lands would not be permitted except in instances where such developments would not have a direct and adverse effect on the river and its immediate environment. The following program management standards apply:

- a. Forest Practices - Forestry practices including timber harvesting would be allowed under standard restrictions to avoid adverse effects on the river environment and its associated values.
- b. Water Quality - Water quality will be maintained or improved to meet Federal criteria or Federally approved state standards. (River management plans shall prescribe a process for monitoring water quality on a continuing basis.)
- c. Hydroelectric Power and Water Resource Development - No development of hydroelectric power facilities would be permitted. Existing low dams diversion works, rip rap and other minor structures may be maintained provided the waterway remains generally natural in appearance. New structures may be allowed provided that the area remains natural in appearance and the practices or structures harmonize with the surrounding environment.
- d. Mining - Subject to existing regulations (e.g., 43 CFR 3809) and any future regulations that the Secretary of the Interior may prescribe to protect the values of rivers included in the National System, new mining claims are allowed and existing operations are allowed to continue. All mineral activity on federally administered land must be conducted in a manner that minimizes surface disturbance, water sedimentation and pollution, and visual impairment. Reasonable mining claim and mineral lease access will be permitted. Mining claims within the scenic river area boundary perfected after the effective date of designation can be patented only as to the mineral estate and not the surface estate.
- e. Road and Trail Construction - Existing parallel roads can be maintained on one or both river banks. There can be several bridge crossings and numerous river access points.
- f. Agricultural Practices and Livestock Grazing - In comparison to scenic river areas, lands may be managed for a full range of agricultural and livestock grazing uses, consistent with current practices.
- g. Recreation Facilities - Interpretive centers, administrative headquarters, campgrounds and picnic areas may be established in proximity to the river. However, recreational classification does not require extensive recreation development.
- h. Public Use and Access - Recreation use including, but not limited to, hiking, fishing, hunting and boating is encouraged in recreational river areas to the extent consistent with the protection of the river environment. Public use and access may be regulated and distributed where necessary to protect and enhance recreational river values.
- i. Rights-of-Way - New transmission lines, natural gas lines, water lines, etc., are discouraged unless specifically prohibited outright by other plans, orders and laws. Where no reasonable alternative exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are unavoidable, locations and construction techniques will be

selected to minimize adverse effects on recreational river area related values and fully evaluated during the site selection process.

- j. Motorized Travel - Motorized travel on land will generally be permitted, on existing roads. controls will usually be similar to that of surrounding lands. Motorized travel on water will be in accordance with existing regulations or restrictions.

## **Management Objectives Common to Wild, Scenic and Recreation Rivers**

### **Wilderness and Wilderness Study Areas**

Management of river areas which overlap designated wilderness areas or wilderness study areas will meet whichever standard is highest. If an area is released from wilderness study area status and the associated Interim Management Policy, the applicable river classification guidelines and standards would then apply.

### **Fire Protection and Suppression**

Management and suppression of fires within a designated river area will be carried out in a manner compatible with contiguous Federal lands. On wildfires, suppression methods will be utilized that minimize long term impacts on the river and river area. Presuppression and prevention activities will be conducted in a manner which reflects management objectives for the specific river segment. Prescribed fire may be utilized to maintain or restore ecological condition or meet objectives of the river plan.

### **Insects, Diseases and Noxious Weeds**

The control of forest and rangeland pests, diseases and noxious weed infestations will be carried out in a manner compatible with the intent of the Act and management objectives of contiguous Federal lands.

### **Cultural Resources**

Historic and prehistoric resource sites will be identified, evaluated and protected in a manner compatible with the management objectives of the river and in accordance with applicable regulations and policies. Where appropriate, historic or prehistoric sites will be stabilized, enhanced and interpreted.

### **Fish and Wildlife Habitat Improvement**

The construction and maintenance of minor structures for the protection, conservation, rehabilitation or enhancement of fish and wildlife habitat are acceptable provided they do not affect the free-flowing characteristics of the river, are compatible with the classifications, that the area remains natural in appearance and the practices or structures harmonize with the surrounding environment.



# Appendix F

## Withdrawals and Classifications

Table F-1. BLM Withdrawals within the South Coast Planning Area

### San Diego County Management Area

Serial No.	Agency	Segregative Affect	Total Acres Affected
PLO 293 (Acquired Surface/ Federal Minerals)	U. S. Navy/U. S. Marine Corp.	Withdrawn from all the public land laws including mining and mineral leasing laws.	125.00
EO 6897 and EO 09/11/1854	U. S. Navy San Clemente Island	Withdrawn from all the public land laws including mining and mineral leasing laws.	36,920.00
PLO 2693	Bureau of Land Management	Withdrawn from settlement, location, sale or entry.	16,675.00
PLO 293	U. S. Navy/U. S. Marine Corp.	Withdrawn from all the public land laws including mining and mineral leasing laws.	1,652.00
EO 07/30/1917	Federal Energy Regulatory Commission	Withdrawn from settlement, location, sale or entry.	1,375.00
FPC Order 02/18/1922	Federal Energy Regulatory Commission	Withdrawn from settlement, location, sale or entry.	1,425.00
FPC 05/10/1924	Federal Energy Regulatory Commission	Withdrawn from settlement, location, sale or entry.	42.00
EO 03/21/1917	Federal Energy Regulatory Commission	Withdrawn from settlement, location, sale or entry.	46.00
EO 01/03/1917	Federal Energy Regulatory Commission	Withdrawn from settlement, location, sale or entry.	160.00
EO 12/31/1912	Bureau of Land Management	Withdrawn from settlement, location, sale or entry.	86.00
PLO 5341	U. S. Navy	Withdrawn from all the public land laws including mining and mineral leasing laws.	1,675.00
EO 8791	U. S. Navy	Withdrawn from all the public land laws including mining and mineral leasing laws.	40.00
EO 02/26/1852	U. S. Navy	Withdrawn from all the public land laws including mining and mineral leasing laws.	40.00
SO 10/01/1851	U. S. Navy	Withdrawn from all the public land laws including mining and mineral leasing laws.	2.00
Presidential Proclamation 05/27/1907	International Boundary Commission	Withdrawn from all the public land laws including mining and mineral leasing laws.	A 60' wide corridor along the Mexican Border.

**Table F-1. BLM Withdrawals within the South Coast Planning Area (cont.)**

<b>Serial No.</b>	<b>Agency</b>	<b>Segregative Affect</b>	<b>Total Acres Affected</b>
PLO 3457	U. S. Navy	Withdrawn from all the public land laws including mining and mineral leasing laws.	1,079.00
PLO 6369	Bureau of Land Management California Department of Fish and Game	Withdrawn from surface entry, the mining and mineral leasing laws.	All rocks, pinnacles, reefs and islands less than two acres off of the California Coast
PLO 1914	U. S. Navy	Withdrawn from all the public land laws including mining and mineral leasing laws.	81.00
<b>Riverside-San Bernardino County Management Area</b>			
Act of Congress 02/20/1909	Bureau of Land Management	Withdrawn from all settlement and entry.	1,040.00
PLO 3221	U. S. Forest Service Service	Withdrawn from settlement, location, sale, or entry.	10,364.00
EO 03/30/1922	Federal Energy Regulatory Commission	Withdrawn from settlement, location, sale or entry.	640.00
R 1958	Bureau of Reclamation	Withdrawn from the public land laws including the mining law.	2,253.00
<b>Beauty Mountain Management Area</b>			
EO of 01/13/1917	Bureau of Land Management	Withdrawn from disposal through homestead, DLE, sale.	428.00
<b>Los Angeles/Orange County Management Area</b>			
PLO 6369	Bureau of Land Management	Withdrawn from surface entry, the mining and mineral leasing laws.	All rocks, pinnacles, reefs and islands less than two acres off the California Coast.
Act of Congress 02/18/1931	Bureau of Land Management	Withdrawn from surface entry, the mining and mineral leasing laws.	All rocks, pinnacles, reefs and islands less than two acres within one mile of the Orange County Coast
EO 6081	Bureau of Land Management	Withdrawn from settlement, location, sale, or entry.	20.00
EO 6741	Bureau of Land Management	Withdrawn from settlement, location, sale, or entry.	40.00
FPC 11/14/63 PWR Project 2426	Federal Energy Regulatory Commission	Withdrawn from settlement, location, sale, or entry.	875.00



**Table F-2. BLM Classifications within the South Coast Planning Area**

**San Diego County Management Area**

<b>Serial No.</b>	<b>Agency</b>	<b>Segregative Affect</b>	<b>Total Acres Affected</b>
<sup>1</sup> Pat. #1230530	Bureau of Land Management	Not open to entry to the mining law.	40.00
<sup>1</sup> Pat. #04-87-0004	Bureau of Land Management	Not open to entry to the mining law.	1,876.00
<sup>1</sup> Pat. #04-85-0145	Bureau of Land Management	Not open to entry to the mining law.	80.00
<sup>1</sup> Pat. #04-85-0167	Bureau of Land Management	Not open to entry to the mining law.	603.00
<sup>1</sup> Pat. #04-85-0178	Bureau of Land Management	Not open to entry to the mining law.	4.01
<sup>1</sup> Pat. #04-84-0051	Bureau of Land Management	Not open to entry to the mining law.	125.00
<sup>1</sup> Pat. #1237730	Bureau of Land Management	Not open to entry to the mining law.	40.00
<sup>1</sup> Pat. #04700164	Bureau of Land Management	Not open to entry to the mining law.	200.00
<sup>1</sup> Pat. #1234912	Bureau of Land Management	Not open to entry to the mining law.	614.00
<sup>1</sup> Pat. #04650233	Bureau of Land Management	Not open to entry to the mining law.	640.00
<sup>2</sup> CA-13059	Bureau of Land Management	Segregated from appropriation under the public land laws and the mining law.	6,335.00
<sup>2</sup> CA-13508	Bureau of Land Management	None - Classified unsuitable for R&PP	600.00
<sup>2</sup> CA-14154 (Application)	Bureau of Land Management	Segregated from appropriation under the public land laws and the mining law.	3,252.00
<sup>2</sup> CA-12718	Bureau of Land Management	Segregated from appropriation under the public land laws and the mining law.	477.00
<sup>2</sup> CA-12719	Bureau of Land Management	Segregated from appropriation under the public land laws and the mining law.	75.00
<sup>2</sup> CA-12720	Bureau of Land Management	Segregated from appropriation under the public land laws and the mining law.	40.00
<sup>2</sup> CA-13781	Bureau of Land Management	Segregated from appropriation under the public land laws and the mining law.	2,027.00
<sup>2</sup> CA-12734	Bureau of Land Management	Segregated from appropriation under the public	145.00

**Riverside-San Bernardino County Management Area**

LA 0171255	Bureau of Land Management	Segregated from location, settlement, entry, and operation of the mining law.	80.00
<sup>2</sup> CA 3765	The Nature Conservancy	Segregated from all appropriations including the mining law.	80.00
<sup>2</sup> CA 3904	University of California	Segregated from all appropriations	80.00
R 06661	Bureau of Land Management	None	437.00

**Table F-2. BLM Classifications within the South Coast Planning Area, (cont.)**

<b>Serial No.</b>	<b>Agency</b>	<b>Segregative Affect</b>	<b>Total Acres Affected</b>
<sup>1</sup> Pat. #1235486	San Bernardino County	Not open to entry to the mining law	520.00
<sup>1</sup> Pat. #1230734	San Bernardino County	Not open to entry to the mining law	40.00
<sup>1</sup> Pat. #1235426	San Bernardino County	Not open to entry to the mining law	160.00
<sup>1</sup> Pat. #1236213	University of California	Not open to entry to the mining law	600.00
<sup>1</sup> Pat. #04690078	Riverside County	Not open to entry to the mining law	640.00
<sup>1</sup> Pat. #04-83-0038	State of California	Not open to entry to the mining law	2,000.00
<sup>1</sup> Pat. #04-83-0037	State of California	Not open to entry to the mining law	640.00
<sup>1</sup> Pat. #1234914	City of Hemet	Not open to entry to the mining law	480.00
<b>Beauty Mountain Management Area</b>			
<sup>2</sup> CA-11773	Bureau of Land Management	Segregated from the public land laws and the mining law.	1,274.00
<sup>1</sup> Pat. #04-83-0038	State of California	Not open to entry to the mining law	80.00
<b>Los Angeles-Orange County Management Area</b>			
<sup>1</sup> Pat. #04-83-0038	State of California	Not open to entry to the mining law	3,422.00
<sup>1</sup> Pat. #04-70-0191	Los Angeles County	Not open to entry to the mining law	10.00
R-02780	Bureau of Land Management	Segregated from the public land laws and the mining law.	80.00

1. Private surface/Federal minerals: R&PP Patent.

2. R&PP lease

# Appendix G

## Livestock Grazing

### Otay Grazing EIS (1984) Decisions

The Otay Grazing Environmental Impact Statement (Otay EIS) and Record of Decision authorized continuation of grazing use on 28 allotments in parts of Riverside, Los Angeles, and San Diego Counties totalling 4,078 AUM's on 50,748 acres of public land. Nine of these have since been eliminated due to land tenure adjustments. The 19 remaining allotments total 3,862 AUM's on 49,321 acres (Table G-1). Thirteen of these allotments are leased at the present time, and six are vacant. All of these allotments are designated for cattle grazing except Steele Peak, which is designated for seasonal sheep grazing. The establishment of nine new grazing allotments totalling 35,412 acres of public land was analyzed by the Otay EIS but was rejected.

Stocking levels for all allotments were maintained at their pre-Otay EIS levels. Prescribed burnings were identified for all six category I allotments for a total of 5,000 acres. The estimated potential forage allocation after burning was 5,853 AUM's, representing a 75% increase from 3,353 AUM's before burning. Other range improvements were identified for the six category I allotments, with design restrictions (Table G-2). The combined estimated costs for all range improvements totalled \$305,000.

### Livestock Grazing Decisions of This Plan

The decisions and alternatives of this plan are presented in Chapter 2. This section presents a discussion of those decisions which relate to livestock grazing. As indicated in Table G-3, the full nature of the decisions will depend on which alternative is ultimately selected.

#### Decisions on Lands Identified for Exchange or Sale

All public lands parcels identified for exchange or sale are closed to grazing applications. Where grazing use currently occurs on such parcels, grazing leases and preferences will be cancelled following a two years' prior notification [43 CFR 4110.4-2(b)].

#### Decisions on Lands not Identified for Exchange or Sale

Table G-3 shows special management areas that are: (a) closed to grazing application because of potential conflict with other resource management objectives; (b) closed to grazing application until a site-specific activity plan has been prepared; and (c) areas within an existing allotment where grazing will be eliminated because of conflict with other resource management objectives. All other public lands which are not presently allotted and are not identified as suitable for sale or exchange are open for grazing applications. Decisions on grazing applications for public lands not identified in Table G-3 and not already allotted will be made on a case-by-case basis following site-specific environmental analysis. Decisions on grazing applications will take into account potential conflict with management of other resources including sensitive species, mineral resources, recreation, archeology, etc, as assessed in the environmental analysis. In addition, decisions on grazing applications for public lands already allotted will also take into consideration potential conflicts not previously recognized and/or analyzed.

## Allotment Categorization

Categorization involves placing allotments into one of three categories, according to similarity in rangeland resource characteristics, in order to identify needed management actions and intensity. The three categories broadly define rangeland management objectives in response to an analysis of the resource characteristics, potential, opportunities, and needs for that allotment. The three categories are Maintain (M), Improve (I) and Custodial (C). The objectives for each of the categories is as follows:

M - Maintain the current resource condition.

I - Improve the current resource condition.

C - Custodially manage the existing resource values.

Table G-1 identifies the category of each existing allotment in the South Coast Planning Area.

**Table G-1. Existing Livestock Grazing Allotments**

Allotment Name	Allotment Number	Allotment Category	Acres	AUM's	Lessee's Name	Management Area <sup>1</sup>
Beauty Mountain	06009	I	17,413	1,452	Agri-Empire Corp.	B-MT
Cameron	07005	C	400	34	(Vacant)	S-DG
Clover Flat	0712	I	7,522	715	Kemp, James	S-DG
Coahuilla	16007	C	156	23	Bradford, Barbara	B-MT
Diamond Valley	16032	C	120	20	(Vacant)	R-SB
Dogpatch	07016	C	150	15	(Vacant)	S-DG
Dulzura	07039	C	400	40	Spotts, Roberta	S-DG
Hauser Mountain	07024	I	2,952	66	Star Ranch	S-DG
La Posta	07006	C	200	23	(Vacant)	S-DG
Mother Grundy	07041	C	720	72	Lucky Six Ranch	S-DG
Otay Mountain	07035	I	5,522	222	(Vacant)	S-DG
Potrero	07046	I	8,594	726	Kemp, James	S-DG
Quail Lake	07075	C	80	16	Ralphs, James L.	LA-O
Rawson Valley	06003	C	40	6	Domenigoni, Francis	R-SB
Rogers Canyon	16042	C	1,102	102	Walker, Frank	R-SB
Skunk Hollow	07075	C	273	20	Sandell, Floyd A.	S-DG
Steele Peak	16042	I	1,580	132	Ethegaray, Sam	R-SB
The Narrows	07001	C	35	6	Untiedt, Allison	S-DG
Tule Valley	16027	C	2,062	172	(Vacant)	B-MT

1. B-MT - Beauty Mountain Management Area  
 LA-O - Los Angeles-Orange County Management Area  
 R-SB - Riverside-San Bernardino County Management Area  
 S-DG - San Diego County Management Area

**Table G-2. Project Design Restrictions from the Otay Grazing EIS (1984)**

1. The location of existing and proposed livestock watering and handling facilities will not be placed within one-quarter mile of riparian zones or sites that are highly susceptible to soil erosion.
2. Fences will not be located on sites that are highly susceptible to soil erosion.
3. When providing livestock movement control, natural barriers will be considered wherever possible to reduce the amount of fence construction.
4. No clearing of vegetation during fence construction and maintenance will be done, except where absolutely necessary.
5. All materials used in the construction of facilities will be of a color that blends and is harmonious with the surrounding background.
6. All existing and proposed livestock watering facilities will be designed to adequately facilitate wildlife water needs.
7. Surface disturbances and the removal of vegetation will be minimized during the construction of facilities, and surface rehabilitation measures will be applied where feasible.
8. Spring sources that are susceptible to damage from livestock trampling will be fenced.
9. Prescribed burns will be planned under prescribed constraints that will assure minimum damage to plant cover and soil.
10. Prescribed burns will be implemented only after an approved burn plan has been developed.
11. Prescribed burns for increasing forage production will be carried out only on potentially suitable sites (as identified by the Soil Conservation Service).
12. Prescribed burns for improving wildlife habitat can be conducted in both potentially suitable and potentially unsuitable areas for livestock grazing.
13. All surface disturbing activities/projects will be placed at least one-quarter mile from populations of sensitive plant species. A field check for all potential sensitive species will be done in the appropriate flowering season for each project, where applicable.
14. Prescribed burning shall take place only on days designated as a "burn day" by the California Air Resources Board.

**Table G-3. Special Management Areas Closed to Livestock Grazing**

Area Name	Alternative(s)	Management Objective
Badlands <sup>1</sup>	3	Protection of Sensitive Species Habitat
Cedar Canyon <sup>2</sup> ACEC	3,4	Protection of a Sensitive Plant Species and Riparian Habitat
Fern Creek and Rainbow Creek	3	Protection of Riparian Habitat
Johnson Canyon ACEC	3,4	Maintenance of Unique Vegetation Resources and Research Potential
Little Tecate Peak (Kuchamaa ACEC)	3	Preservation of Native American Values
Tecate Peak (Kuchamaa ACEC)	3,4	Preservation of Native American Values
Oak Mountain	3,4	Protection of Sensitive Plant Species
Santa Ana River Wash ACEC <sup>4</sup>	All	Protection of Sensitive Plant Species
Santa Margarita ACEC	3,4	Protection of Riparian and Sensitive Species Habitat
Steele Peak <sup>3</sup> ACEC <sup>4</sup>	1,3,4	Protection of Sensitive Species Habitat
Valle Vista	3	Protection of a Sensitive Plant Species

1. Grazing is allowed only if found to be compatible with habitat management objectives in activity plan.
2. Area within the existing Otay Mountain allotment to be excluded from livestock grazing.
3. Grazing within the existing allotment is permitted. Grazing outside of the existing allotment is allowed only if found to be compatible with habitat management objectives in activity plan.
4. ACEC designation only in Alternatives 3 and 4.

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# Appendix H

## Visual Resource Management

The visual resource inventory process provides BLM managers with a means for determining visual values. The inventory consists of a scenic quality evaluation, sensitivity level analysis, and a delineation of distance zones. Based on these three factors, BLM administered lands are placed into one of four visual resource inventory classes. The inventory classes represent the relative value of the visual resources. Classes I and II being the most valued, Class III representing a moderate value, and Class IV being of least value. The inventory classes provide the basis for considering visual values in the resource management planning (RMP) process for all BLM administered lands (see also Manual 1625.3). Visual management objectives are established for each class, and are defined below:

### VRM Management Class Objectives

#### Class 1 Objective

The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

#### Class 2 Objective

The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be very low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

#### Class 3 Objective

The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract the attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

#### Class 4 Objective

The objective of this class is to provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

# APPENDIX A

## THE UNIVERSITY OF MICHIGAN LIBRARY

1950-1951

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### THE UNIVERSITY OF MICHIGAN LIBRARY

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# Appendix I

## Parcels Containing Major Utility/Transportation Facilities, But Not Within a Designated Right-of-Way Corridor<sup>1</sup>

### San Diego County Management Area

### Riverside-San Bernardino County Management Area

Parcel No.	Facilities	Parcel No.	Facilities
244-081	State Highway	107-101	County Road
292-331	Electric Transmission Lines	144-041	State Highway
293-331	State Highway	145-241	Electric Transmission Lines
294-241	County Road	145-282	State Highway
301-211	Communication Site	146-301	State Highway
301-221	State Highway	146-321	Aqueduct
302-151	State Highway	160-321	County Road
302-211	Electric Transmission Lines	162-221	Electric Transmission Lines
302-241	Electric Transmission Lines	177-181	Electric Transmission Lines
303-121	Electric Transmission Lines	177-301	Communication Site
303-191	Electric Transmission Lines	189-341	County Road
303-221	Electric Transmission Lines	218-231	Interstate 15
		221-041	Highway 60
		221-221	State Highway

### Beauty Mountain Management Area

### Los Angeles-Orange County Management Area

Parcel No.	Facilities	Parcel No.	Facilities
232-251	County Road	016-031	Electric Transmission Lines
		018-311	Electric Transmission Lines
		019-331	Electric Transmission Lines
		019-351	State Highway
		019-361	State Highway
		020-011	Pipeline
		024-311	Pipeline
		025-011	Electric Transmission Lines
		026-042	Electric Transmission Lines
		026-141	Electric Transmission Lines

<sup>1</sup> See Appendix A for parcel listing.

TABLE I  
RESULTS OF THE EXPERIMENT

TABLE I  
RESULTS OF THE EXPERIMENT

Run No.	Time (min)	Temperature (°C)	Pressure (mm Hg)	Yield (%)
1	10	100	10	85
2	20	100	10	88
3	30	100	10	90
4	40	100	10	92
5	50	100	10	93
6	60	100	10	94
7	70	100	10	95
8	80	100	10	96
9	90	100	10	97
10	100	100	10	98

TABLE II  
ANALYTICAL DATA

Element	Calcd (%)	Found (%)
C	75.2	75.0
H	6.8	6.7
N	18.0	18.1

# Appendix J

## Inventory and Analysis of Mineral Resources

### Introduction

The mineral resources analyzed in this document are categorized as either leasable, salable or locatable. Leasable minerals are generally those that can be leased from the federal government; these includes oil and gas, phosphate, sodium, potash, and geothermal steam. Salable minerals are generally those which may be sold from BLM-administered lands under the Material Sale Act of 1947, as amended; included are common varieties of sand, stone, gravel, and clay. Locatable minerals are minerals or materials subject to disposal and development through the Mining Law of 1872, (as amended); generally included are metallic minerals such as gold and silver as well as other materials not subject to lease or sale and having special values or characteristics (all metallic minerals, some bentonite, limestone, talc, zeolite, clays, gypsum, etc.).

### Mineral Potential Classifications

The mineral potential classifications were accomplished for the entire planning area including BLM-administered, other federal (Forest Service, military, etc.), state-owned and private land. This procedure was used because it would give a better overall view of the mineral situation and how past mineral activity and present mineral classification could affect BLM-administered lands. The inventory procedure used for each category of minerals is as follows.

#### Leasable Minerals

##### Oil and Gas Occurrence Potential

Four categories were assigned to the oil and gas occurrence potential; these are high, moderate, low, and none. In addition, those areas identified as having high potential and within close proximity to existing fields were noted. The basis for a high classification is either the inclusion of a U.S. Geological Survey (USGS) oil and gas play or, in the absence of a USGS play, the demonstrated existence of (1) source rock, (2) thermal maturation, or (3) reservoir strata possessing permeability and/or porosity and traps (sic).

Areas classified moderate in potential are those with geophysical or geological indications that (1) source rock, or (2) thermal maturation, or (3) reservoir strata possessing permeability and/or porosity and traps (sic), are present. Areas classified low in potential are those with specific indications that one or two of (1) source rock, or (2) thermal maturation, or (3) reservoir strata possessing permeability and/or porosity and traps (sic), may not be present. Areas with a potential classification of none are those with a demonstrated absence of (1) source rock, (2) thermal maturation, or (3) reservoir strata possessing permeability and/or porosity and traps (sic).

The above classification schemes were applied to the geologic occurrences of oil and gas as described in Beyer (1988) for the Los Angeles basin. Elsewhere, the state-published 1:250,000 geologic maps were used as classification guidelines on geology and structure.

The specific geologic classifications for each of the above schemes are discussed as follows:

High - The principle reservoir rocks of the eastern Ventura and Los Angeles basin producing areas constitute this classification. The source rocks are the deeply buried mid-Miocene turbidite sands of the Tarzana and Puente submarine fan complexes (Beyer 1988). These fan

complexes are labeled on the classification maps. The high classification is assigned to an area overlying the lateral extent of these fans as described by Beyer (1988, figure 3). The producing fields occur where basement faulting offsets or folds the reservoir rocks causing traps. See Beyer (1988) for a thorough technical discussion and an extensive reference listing).

Moderate - Areas underlain by marine rocks of mid to late Miocene in age but with no demonstrated occurrence potential.

Low - Areas within nonmarine sedimentary basins. Being nonmarine, the buried sedimentary rocks, although permeable and porous, lack source beds.

None - Areas underlain chiefly by non-sedimentary (intrusive, volcanic, metamorphic) rocks or pre-Tertiary sedimentary rocks.

The oil and gas potential areas were hand mapped and then digitalized for transfer to a Map Overlay Statistical System (MOSS) data base for use in this RMP evaluation.

### **Geothermal Resources**

Geothermal resources of California, Map No. 5, California Divisions of Mines and Geology was relied on for geothermal information.

### **Salable Minerals**

The Special Reports classifying the sand and gravel resource areas completed by the California Divisions of Mines and Geology (CDMG) and final SMARA EIR's also completed by the CDMG designating the Production Consumption Regions in the greater Los Angeles area and San Diego County were obtained from that agency. Generally areas classified by the CDMG as MRZ-2 were assigned high potential values, areas classified by the CDMG as MRZ-3 or MRZ-4 were assigned BLM moderate potential values, and areas classified by the CDMG as MRZ-1 were assigned low potential values. As these areas were hand mapped onto overlays further interpolation using geologic controls and production data was accomplished to determine mineral potential under the BLM classification system. The finished overlays were then digitalized for transfer into a MOSS data base which was then used for the RMP evaluation.

Because the 1:250,000 scale geologic maps available for southern California do not differentiate the boundaries of the different rock units in the Southern California Granitic Batholith most areas of the batholith not classified as high potential using the CDMG and production data were classified as moderate potential for aggregate resources.

### **Locatable Minerals**

Information published by the MILS data system identifying past mining activity was obtained on a DBase III plus data base from the U.S. Bureau of Mines. This data was converted for importation in a MOSS data base. The subsequent data point overlays were used in conjunction with geologic and structural controls to identify high and moderate potential areas. Areas not classified as high or moderate potential were assumed to be low potential. No field verification was completed for this inventory.

### **Confidence Levels**

Since the available oil and gas and geothermal data used for classification purposes is relatively recent and complete there is a high confidence level for these resources. Due to the completeness of the CDMG data there is a high to moderate confidence level for salable resources. The available

MILS data used to classify the high potential areas for locatable resources compels a high confidence level. However, since the moderate and low potential areas for locatable resources is primarily based on geologic and structural controls associated with the high potential areas and no field verification was possible only a low confidence can be assumed for these areas.





# Appendix K

## Land Tenure Adjustments

In the alternatives developed for this Resource Management Plan, individual parcels may be available for different forms of disposal (such as sale or exchange) and with various conditions on the availability of a given parcel for disposal. The disposal methods and conditions are separated into several different categories as defined:

- S - Exchange or Sale - Parcels suitable for FLPMA sale, but will be given priority for exchange as guided by RMP.
- X - Exchange Only - Parcels not suitable for sale, but available for exchange. These are most often small parcels adjacent to the National Forests.
- C - Consolidation Exchange - Parcels which may very well remain under BLM management, but are available for any exchange to consolidate ownership in defined areas in order to meet management of objectives.
- K - Exchange (SKR Conditioned) - Parcels not available for any disposal action except exchange to acquire land at Steele Peak until the acquisition threshold for Steele Peak is attained. At such time these parcels would be generally available for disposal.
- P - Protective Disposal - Parcels containing sensitive resources which due to isolation from other public lands are suitable for disposal providing the sensitive resources will be compensated or protected by the new land owner/manager.
- L - R&PP - Parcels which are currently under R&PP lease or Cooperative Agreements with local or State governments and which are identified for either sale or retention under various alternatives, should the current leases be terminated.
- F - Forest Service Transfer - Parcels suitable for jurisdictional exchange to the National Forest System, but not available for transfer from Federal ownership.
- R - Retain - BLM public lands not available for disposal.

The category of disposal availability corresponding to each parcel for each RMP alternative is presented in the following table. The legal description for each parcel number can be found in Appendix A. The township and range from the legal description of a given parcel can be used as the coordinates for finding its map location.

**Table K-1. Land Tenure Adjustments for Each Alternative by Parcel**

**San Diego County Management Area**

Parcel No.	Acres	Alternative 1	Alternative 2	Alternative 3 Preferred	Alternative 4
228-031	42.64	S	S	R	R
228-101	40.00	S	S	R	S
228-151	40.00	S	S	C	R
229-041	160.00	S	S	R	S
231-021	200.00	R	X	X	X
231-111	240.00	R	X	X	X
232-211	196.22	X	X	S	S
232-212	39.82	R	X	X	X
232-281	41.31	R	X	X	X
236-221	1.12	S	S	S	S
239-051	1.71	S	S	S	S
241-011	2.72	S	S	S	S
241-012	600.00	R	X	F	X
244-061	0.02	S	S	S	S
244-081	1.32	S	S	S	S
245-091	78.97	S	S	S	S
246-221	40.00	S	S	S	R
246-251	53.56	S	S	S	S
247-011	4923.72	L	L	R	R
247-331	40.00	S	S	R	R
247-332	80.00	S	S	R	R
249-171	2.18	S	S	S	S
249-321	40.00	R	X	F	F
249-172	16.30	S	S	S	S
253-331	75.00	L	L	L	L
254-311	397.12	L	L	L	L
255-011	0.29	S	S	S	S
255-051	38.96	S	S	R	R
255-081	39.32	S	S	S	S
255-151	81.46	S	S	S	S
255-231	1696.65	L	L	R	R
255-271	40.00	L	L	L	L
256-311	282.15	L	L	R	R
257-041	40.00	R	X	F	F
257-091	40.00	R	X	F	F
260-031	0.21	S	S	S	S
260-041	.02	S	S	S	S
260-231	40.00	S	S	S	S
261-061	80.00	L	L	L	L
262-211	79.93	L	L	L	L
262-212	68.30	L	L	L	L
262-221	35.00	S	S	S	S
263-351	84.32	S	S	S	S
263-361	58.95	S	S	S	S
264-081	30.00	S	S	S	S

Table K-1. Land Tenure Adjustments for Each Alternative by Parcel (cont.)

San Diego County Management Area

Parcel No.	Acres	Alternative 1	Alternative 2	Alternative 3 Preferred	Alternative 4
264-082	141.37	S	S	S	S
264-151	120.00	L	L	R	R
264-191	1460.15	L	L	R	R
269-081	40.00	S	S	S	S
269-151	0.20	S	S	S	S
269-251	2832.22	L	L	R	R
270-051	170.92	S	S	S	S
270-061	40.00	S	S	S	S
270-081	160.00	X	X	X	X
270-191	10.00	X	X	X	X
270-192	160.00	X	X	X	X
283-171	40.00	R	X	C	C
283-351	160.80	R	X	C	C
290-081	80.00	S	S	C	C
290-201	760.00	S	S	R	R
290-291	80.00	S	S	C	C
291-091	200.00	S	X	R	R
292-191	80.00	R	X	C	C
292-251	2687.64	R	R	C&R	C&R
292-281	600.00	R	X	R	R
292-301	160.00	X	S	C	C
292-311	668.23	X	S	R	R
292-331	1770.34	X	S	C&R	C&R
293-301	160.00	R	X	C	C
293-321	40.00	R	X	C	C
293-322	160.00	R	X	C	C
293-323	80.00	X	S	C	C
293-331	7281.44	R	R	R	R
294-131	866.20	R	X	C	C
294-132	1949.32	R	X	C	C
294-151	35.00	R	X	C	C
294-211	105.00	R	S	C	C
294-241	391.32	X	S	C	C
294-291	4.93	S	S	S	S
294-292	1.35	S	S	S	S
294-293	1.20	S	S	S	S
294-341	615.34	X	S	C	C
295-071	280.00	X	S	C	C
295-311	280.00	X	S	C	C
296-331	80.00	S	S	C	C
299-011	18771.50	R	R	R	R
299-181	40.00	S	S	R	R
300-021	440.00	X	S	R	C
300-121	396.77	X	S	R	C
300-131	280.00	X	S	R	C

**Table K-1. Land Tenure Adjustments for Each Alternative by Parcel (cont.)**

**San Diego County Management Area**

Parcel No.	Acres	Alternative 1	Alternative 2	Alternative 3 Preferred	Alternative 4
300-151	240.00	X	S	C	C
300-211	71.50	R	S	C	C
300-361	40.71	R	S	C	C
301-111	360.00	X	S	C	C
301-151	200.00	X	S	C	C
301-171	200.00	X	S	C	C
301-211	485.57	X	S	R	R
301-221	841.26	R	S	R	R
302-061	80.05	X	S	C	C
302-091	159.75	X	S	C	C
302-151	141.27	X	S	C	C
302-211	446.84	X	S	C	C
302-241	155.87	X	S	C	C
303-061	40.00	X	S	C	C
303-121	3350.56	R	R	R	R
303-171	200.00	X	S	R	R
303-191	354.99	X	S	C	C
303-211	80.00	X	S	C	C
303-221	48.11	X	S	R	R
304-061	75.22	S	S	C	C
305-021	219.85	S	S	C	C
305-031	80.00	S	S	C	C
305-091	40.00	S	S	C	C
305-151	46.19	S	S	C	C

**Riverside-San Bernardino County Management Area**

107-021	40.00	R	R	R	R
107-101	480.00	R	R	R	R
107-121	240.00	R	R	R	R
108-081	280.00	R	R	R	R
122-021	243.14	S	S	S	S
122-022	40.32	S	S	S	S
144-021	320.00	S	S	R	S
144-041	203.18	S	S	R	S
144-101	488.85	K	S	R	K
145-241	318.99	K	S	K	K
145-281	80.00	K	S	K	K
145-282	80.00	K	S	K	K
145-321	120.00	K	S	K	K
146-281	580.00	R	S	R	R
146-301	265.00	K	P	K	K
146-361	240.00	R	X	R	R
146-321	7968.64	R	R	R	R
160-141	40.00	K	P	K	K

Table K-1. Land Tenure Adjustments for Each Alternative by Parcel (cont.)

Riverside-San Bernardino County Management Area

Parcel No.	Acres	Alternative 1	Alternative 2	Alternative 3 Preferred	Alternative 4
160-241	40.00	K	P	K	K
160-281	160.00	R	P	R	R
160-321	464.60	R	P	R	R
161-061	0.18	S	S	S	S
162-221	120.00	S	S	K	S
162-261	113.80	S	S	S	S
162-301	85.78	S	S	K	S
164-021	80.00	R	X	X	X
164-101	25.46	R	X	X	X
164-221	890.00	R	X	X	X
164-351	40.00	R	X	X	X
175-081	320.00	K	P	K	K
175-101	320.00	K	S	K	K
175-241	360.00	S	S	S	S
176-041	755.08	R	P	R	R
176-141	80.00	K	P	K	K
176-201	160.00	R	P	R	R
176-221	19.80	K	P	K	K
176-261	640.00	K	P	K	R
176-281	100.00	K	P	K	K
176-341	160.00	K	S	K	K
177-181	157.14	K	P	K	K
177-301	80.00	K	S	K	K
179-261	80.00	S	S	S	S
180-111	545.00	R	X	R	X
180-141	1470.00	R	X	R	X
180-271	50.00	P	P	K	P
180-272	190.00	K	S	K	K
180-281	40.00	S	S	S	S
180-341	340.00	S	S	K	S
188-041	79.88	S	S	K	S
189-101	40.00	K	S	K	K
189-341	0.05	S	S	S	S
190-301	70.47	S	S	S	S
190-302	80.00	S	S	K	S
190-303	3.20	S	S	S	S
190-321	200.00	P	P	P	P
191-041	160.86	S	S	K	S
191-061	79.75	K	S	K	K
191-241	40.00	K	P	K	K
191-242	40.00	K	P	K	K
192-061	120.25	S	S	K	S
192-101	160.00	S	S	S	S
192-261	40.00	S	S	S	S
193-041	145.63	S	S	S	S

Table K-1. Land Tenure Adjustments for Each Alternative by Parcel (cont.)

Riverside-San Bernardino County Management Area

Parcel No.	Acres	Alternative 1	Alternative 2	Alternative 3 Preferred	Alternative 4
193-101	670.20	R	X	X	X
193-181	360.00	S	S	S	S
193-361	56.94	R	X	X	X
205-081	40.00	S	S	S	S
205-082	120.00	K	P	K	K
205-121	122.79	S	S	S	S
205-321	122.30	S	S	R	S
205-341	480.00	S	S	R	S
206-101	360.00	S	S	S	S
206-121	320.00	S	S	S	S
206-141	40.00	S	S	S	S
206-301	166.73	S	S	S	S
207-121	675.82	S	S	S	S
208-041	40.00	S	S	S	S
208-042	240.12	R	X	X	X
208-051	40.00	R	X	X	X
208-061	198.22	R	X	X	X
208-131	20.00	R	X	X	X
208-132	120.00	S	S	S	S
208-181	50.00	S	S	S	S
208-182	10.00	S	S	S	S
216-251	80.00	S	S	C	R
216-361	772.96	R	X	R	R
217-261	1120.00	S	S	R	S
218-231	859.81	R	S	R	R
218-261	40.00	R	R	R	R
218-331	320.00	R	R	R	R
219-241	200.00	S	S	S	S
219-291	970.94	S	S	R	R
220-041	286.12	S	S	R	S
220-191	360.00	F	F	F	F
220-241	40.00	R	X	X	X
221-041	329.35	S	S	S	S
221-042	160.00	S	S	S	S
221-221	407.81	S	S	S	S
221-271	80.00	S	S	S	S
221-301	40.00	R	X	X	X
221-331	40.00	R	X	X	X
221-332	40.00	R	X	X	X
221-351	39.89	S	S	S	S
<b>Beauty Mountain Management Area</b>					
221-131	160.00	S	S	S	S
221-231	2168.97	X	S	C&R	C&R
222-071	40.00	S	S	S	S

**Table K-1. Land Tenure Adjustments for Each Alternative by Parcel (cont.)**

**Beauty Mountain Management Area**

Parcel No.	Acres	Alternative 1	Alternative 2	Alternative 3 Preferred	Alternative 4
222-081	40.00	S	S	S	S
222-082	40.00	S	S	S	S
222-141	40.00	S	S	S	S
222-221	15113.56	R	R	C&R	C&R
223-091	38.90	S	S	S	S
223-161	400.00	R	S	S	S
223-181	240.00	S	S	S	S
223-182	43.36	S	S	S	S
223-221	560.00	X	S	C	C
223-241	560.00	X	S	S	S
223-261	640.00	X	S	C	C
223-361	640.00	X	S	R	R
232-081	346.72	X	S	S	S
232-101	3294.46	X	R	R	R
232-161	40.47	X	S	S	S
232-251	2263.44	R	X	R	R
233-111	685.26	X	S	R	R
233-121	590.21	X	S	R	R
233-221	560.00	R	X	R	R
241-011	2.72	S	S	S	S

**Los Angeles-Orange County Management Area<sup>1</sup>**

002-161	80.00	S		S	S
002-361	160.00	S		S	S
002-362	79.55	S		S	S
003-311	240.12	F		F	F
011-261	80.00	L		L	L
012-311	376.53	L		L	L
016-031	337.94	C&R		C&R	C&R
017-071	40.00	L		L	L
017-181	40.00	L		L	L
017-201	40.00	S		S	S
018-311	5.00	S		S	S
019-201	40.00	S		S	S
019-241	80.00	S		S	S
019-271	0.32	S		S	S
019-272	0.62	S		S	S
019-273	307.72	S		S	S
019-291	2.79	S		S	S
019-301	38.50	S		S	S
019-331	40.00	S		S	S
019-351	70.00	S		S	S
019-361	160.00	F		R	F
020-011	200.00	S		S	S
020-081	40.00	S		S	S
020-121	40.00	S		S	S

**Table K-1. Land Tenure Adjustments for Each Alternative by Parcel (cont.)**

**Los Angeles-Orange County Management Area<sup>1</sup>**

<b>Parcel No.</b>	<b>Acres</b>	<b>Alternative 1 Preferred</b>	<b>Alternative 2</b>	<b>Alternative 3</b>	<b>Alternative 4</b>
020-131	90.00	S		S	S
020-221	70.00	S		S	S
020-261	10.00	S		S	S
020-271	24.32	S		S	S
020-301	40.00	S		S	S
022-021	1.25	S		S	S
022-041	52.50	S		S	S
022-051	40.13	S		S	S
022-061	40.00	S		S	S
022-101	79.27	S		S	S
024-121	80.00	S		S	S
024-151	80.00	S		S	S
025-011	816.07	F		R	F
025-051	5.49	S		S	S
025-061	67.50	S		S	S
026-021	440.00	S		S	S
026-041	39.61	S		S	S
026-042	315.63	S		S	S
026-071	34.87	S		S	S
026-081	5.00	S		S	S
026-141	80.05	S		S	S
026-142	51.40	S		S	S
032-021	168.65	S		S	S
032-111	78.94	S		S	S
032-112	30.42	S		S	S
032-121	194.89	S		S	S
032-122	80.00	S		S	S
033-081	17.12	S		S	S
033-191	77.56	S		S	S
101-341	0.01	S		S	S
101-342	0.17	S		S	S
167-191	2.00	S		S	S
186-081	1.35	S		S	S

<sup>1</sup>. For the Los Angeles-Orange County Management Area Alternative 2 is equivalent to Alternative 1.



# Appendix L

## Recreation and Public Purposes Act Leases and Patents

Table L-1. Lands within the South Coast Planning Area Which are Leased or Patented under the Recreation and Public Purposes Act

### San Diego County Management Area

Lease or Patent No.	Holder	Management Objective	Acres
<b>Leases</b>			
CA-12718	Olivenhain Municipal Water District	Water reservoir/Mt. Israel recreation area - hiking and equestrian day use	477.00
CA-12719	Olivenhain Municipal Water District	Water storage/Gaty parcel recreation area - hiking, picnicking and equestrian day use	75.00
CA-12720	Olivenhain Municipal Water District	Water storage/recreation area - hiking day use	40.00
CA-12734	Ramona Municipal Water District	Recreation area - picnicking and hiking day use	145.00
CA-13059	San Diego County	Recreation areas (4 separate parks at Lakeside, Swartz Canyon, Hellhole Canyon and Otay) for picnicking, hiking and equestrian day use	6,335.00
CA-13781	City of San Diego	San Pasqual recreation area - hiking	2,027.00
<b>Patents</b>			
1230530	Fallbrook Municipal Water District	Water reservoir	40.00
04650233 & 1234912	San Diego County	Sycamore Canyon Park recreation area - equestrian and hiking day use	1,254.00
04700164	City of San Diego	Black Mountain Park - picnicking and hiking day use	200.00
1237730	City of San Diego	Black Mountain Park - Water reservoir	40.00
04-84-0051	Audubon Society	Recreation - bird watching	125.00
04-85-0167	Nature Conservancy	McGinty Mt. recreation area - hiking, botanical sight-seeing day use	603.00
04-85-0178	Kiwanis	Potrero Clubhouse	4.01
04-87-0004	City of Poway	Mt. Woodson Recreation area - hiking	1,876.00

**Table L-1. Lands within the South Coast Planning Area Which are Leased or Patented under the Recreation and Public Purposes Act (cont.)**

**Riverside-San Bernardino County Management Area**

<b>Lease or Patent No.</b>	<b>Holder</b>	<b>Management Objective</b>	<b>Acres</b>
<b>Leases</b>			
CA-3765	Nature Conservancy	Dorland Reserve nature study and hiking area	80.00
CA-3904	University of California	Ecological research area	80.00
<b>Patents</b>			
1230734 & 1235486	San Bernardino County	Landfill and Yucaipa Regional Park equestrian and hiking area	560.00
1235426	University of California	Ecological research area	160.00
04690078	Riverside County	Kabian Park - equestrian and picnicking, day use	640.00
1236213	Riverside County	DeAnza OHV Park and Landfill	600.00
1234914	City of Hemet	Simpson Park - day use, picnicking, hiking and education	480.00
04-83-0037 & 04-83-0038	State of California	Anza-Borrego Desert State Park	2,640.00

**Beauty Mountain Management Area**

<b>Leases</b>			
CA-11773	San Diego State University	Ecological research area	1,274.00
<b>Patents</b>			
04-83-0038	State of California	Anza-Borrego Desert State Park	80.0

**Los Angeles-Orange County Management Area**

<b>Patents</b>			
04-83-0095	State of California	Hungry Valley State OHV Park	3,422.00
04-70-0191	Los Angeles County	Vasquez Rocks Park - picnicking and hiking day use	10.00

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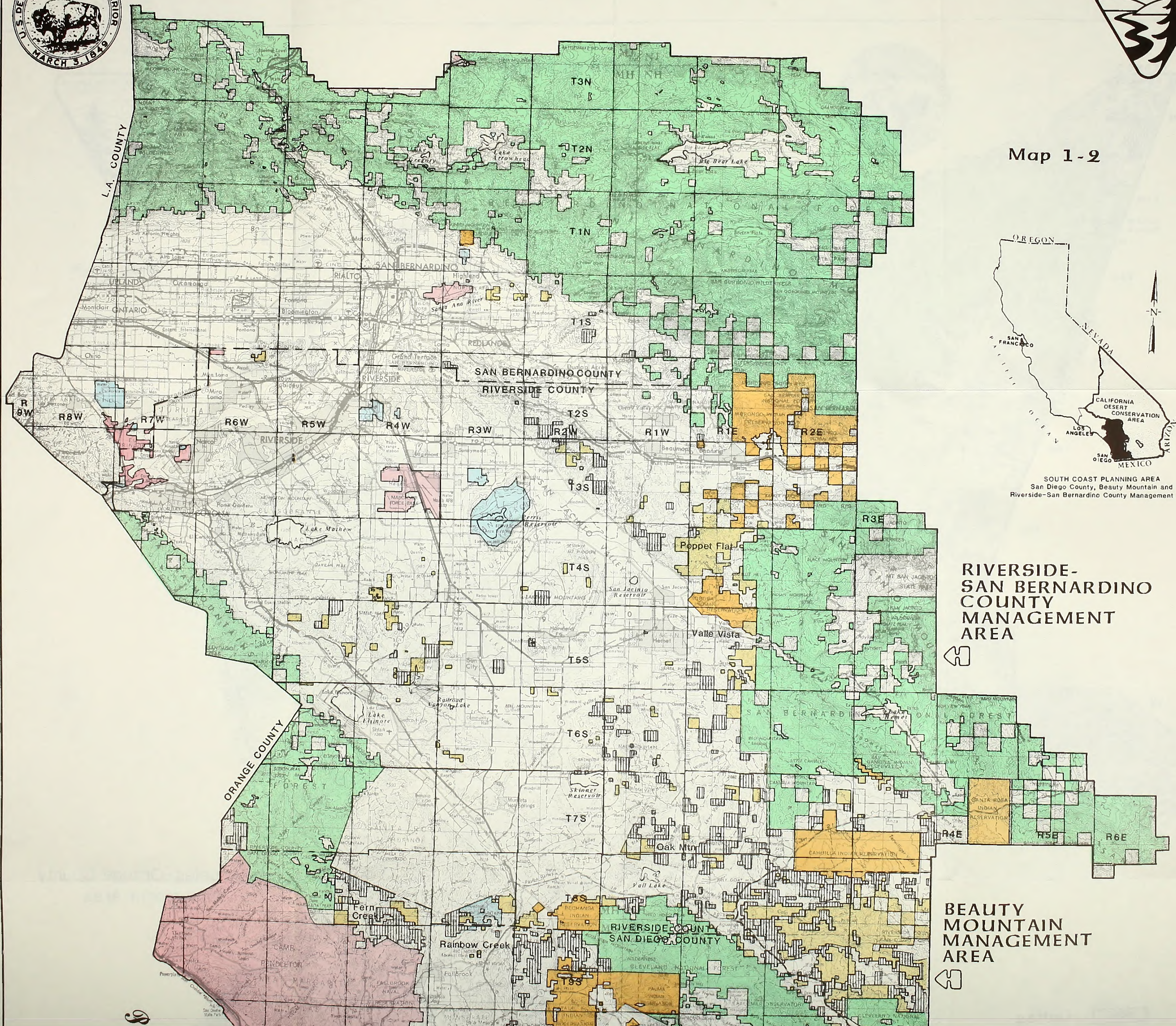



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# LAND OWNERSHIP

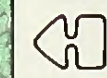


Map 1-2

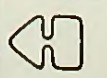


SOUTH COAST PLANNING AREA  
San Diego County, Beauty Mountain and  
Riverside-San Bernardino County Management Areas

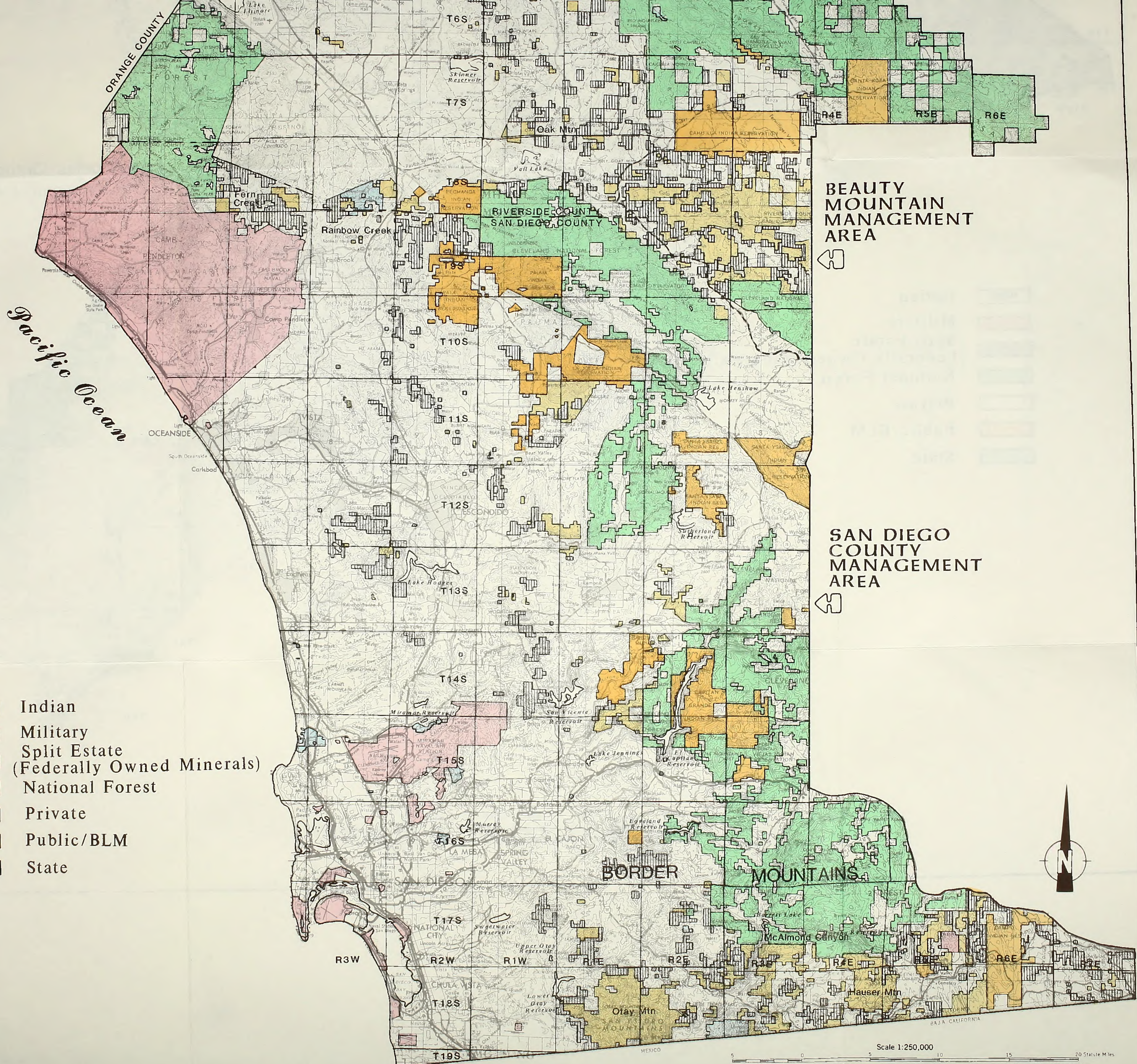
**RIVERSIDE-SAN BERNARDINO COUNTY MANAGEMENT AREA**



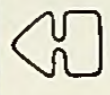
**BEAUTY MOUNTAIN MANAGEMENT AREA**



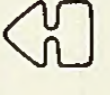


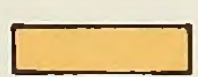








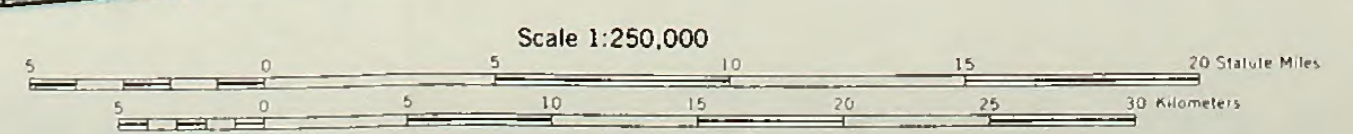
BEAUTY MOUNTAIN  
MANAGEMENT  
AREA



SAN DIEGO  
COUNTY  
MANAGEMENT  
AREA



-  Indian
-  Military
-  Split Estate  
(Federally Owned Minerals)
-  National Forest
-  Private
-  Public/BLM
-  State



# LAND OWNERSHIP

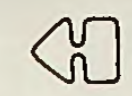


Map 1-3

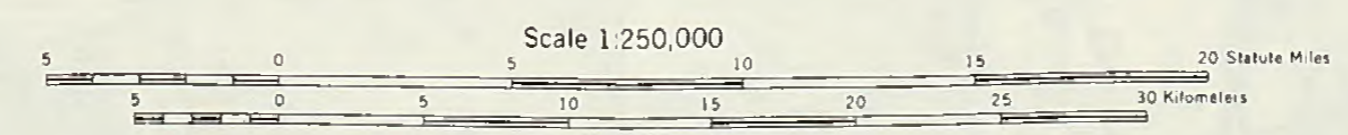




Los Angeles-Orange County Management Area

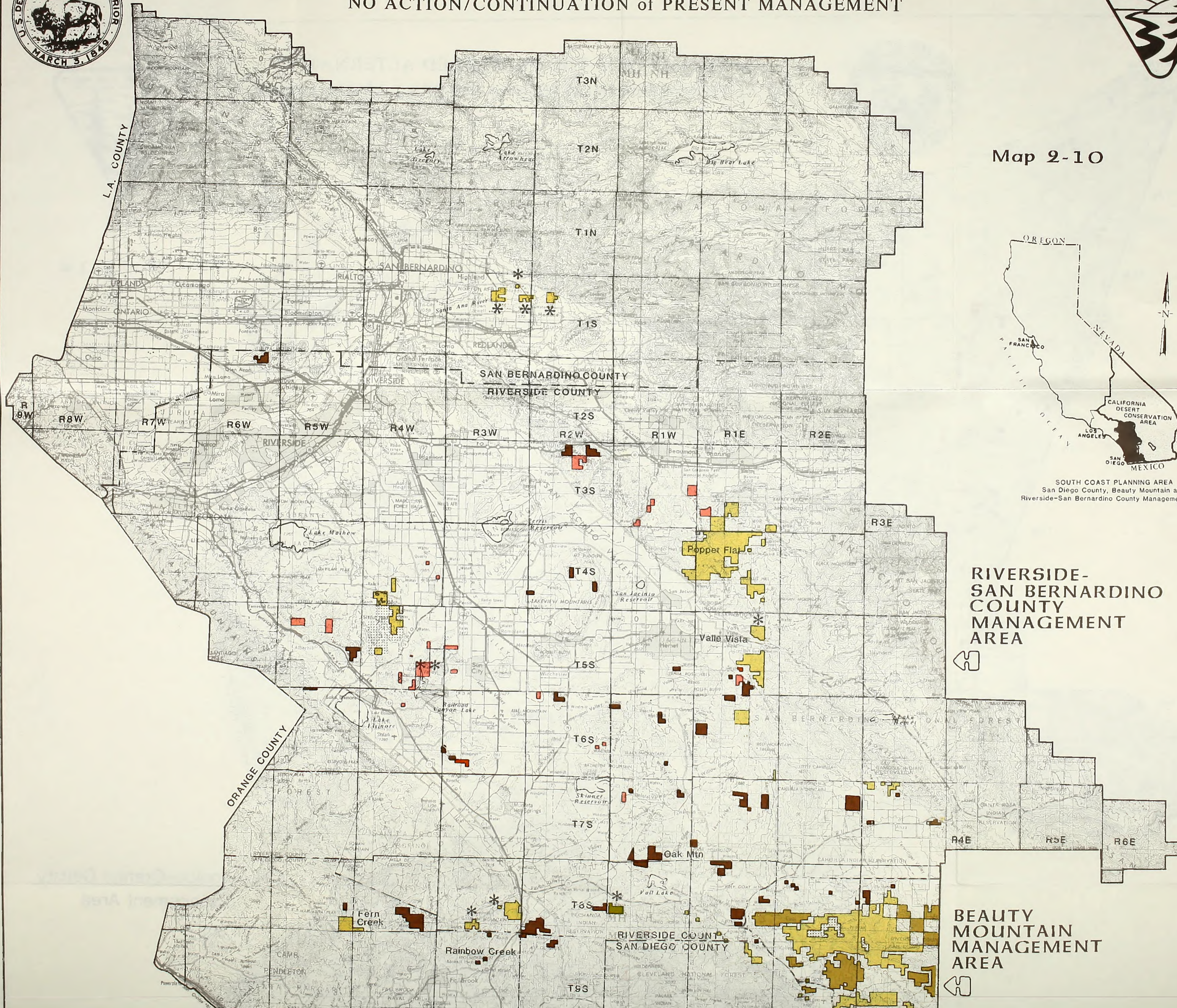


- NONE
- Indian
- Military
- Split Estate  
(Federally Owned Minerals)
- National Forest
- Private
- Public/BLM
- State





ALTERNATIVE 1  
NO ACTION/CONTINUATION of PRESENT MANAGEMENT

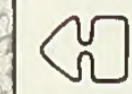


Map 2-10

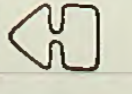


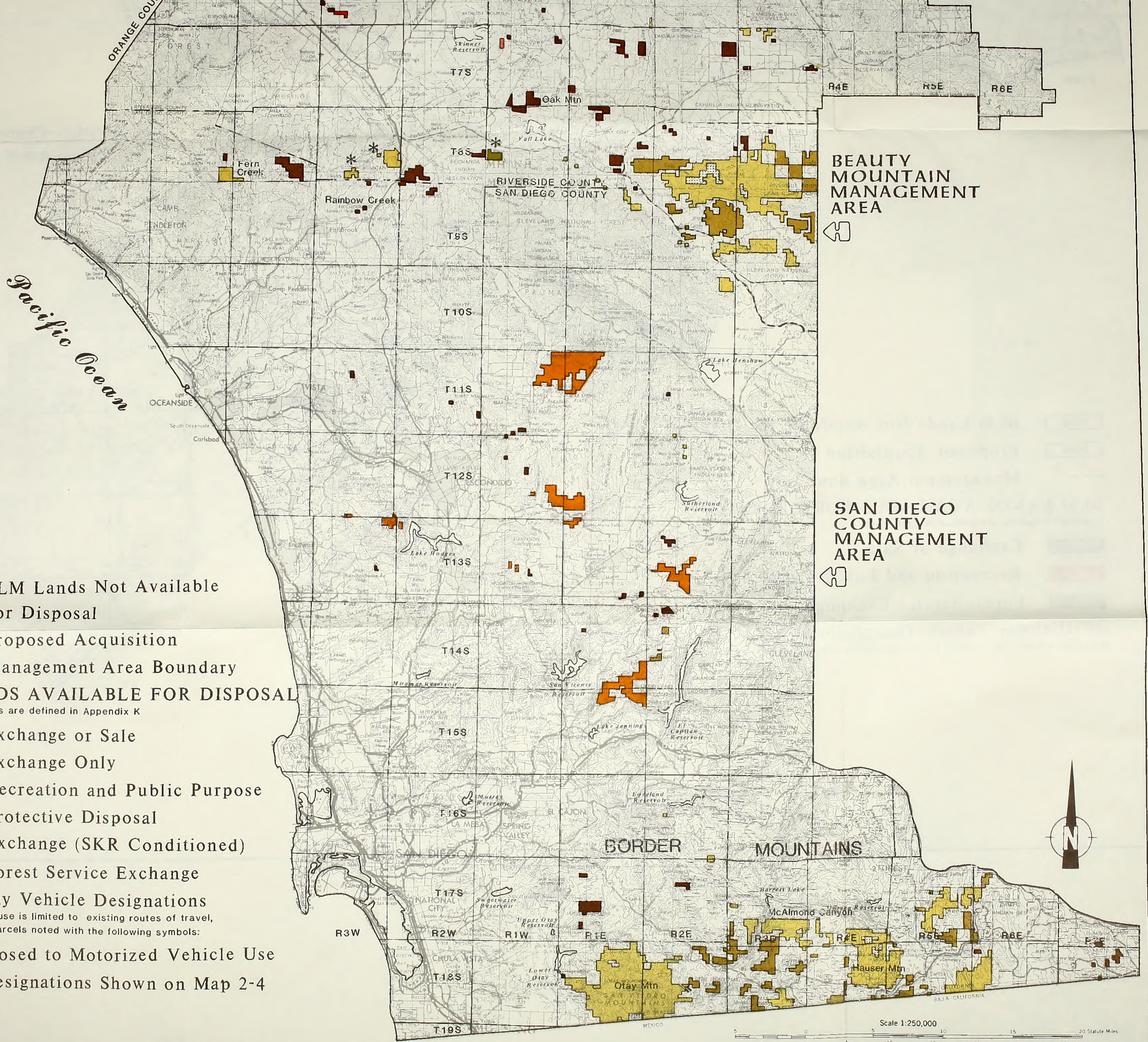
SOUTH COAST PLANNING AREA  
San Diego County, Beauty Mountain and  
Riverside-San Bernardino County Management Areas

RIVERSIDE-  
SAN BERNARDINO  
COUNTY  
MANAGEMENT  
AREA



BEAUTY  
MOUNTAIN  
MANAGEMENT  
AREA





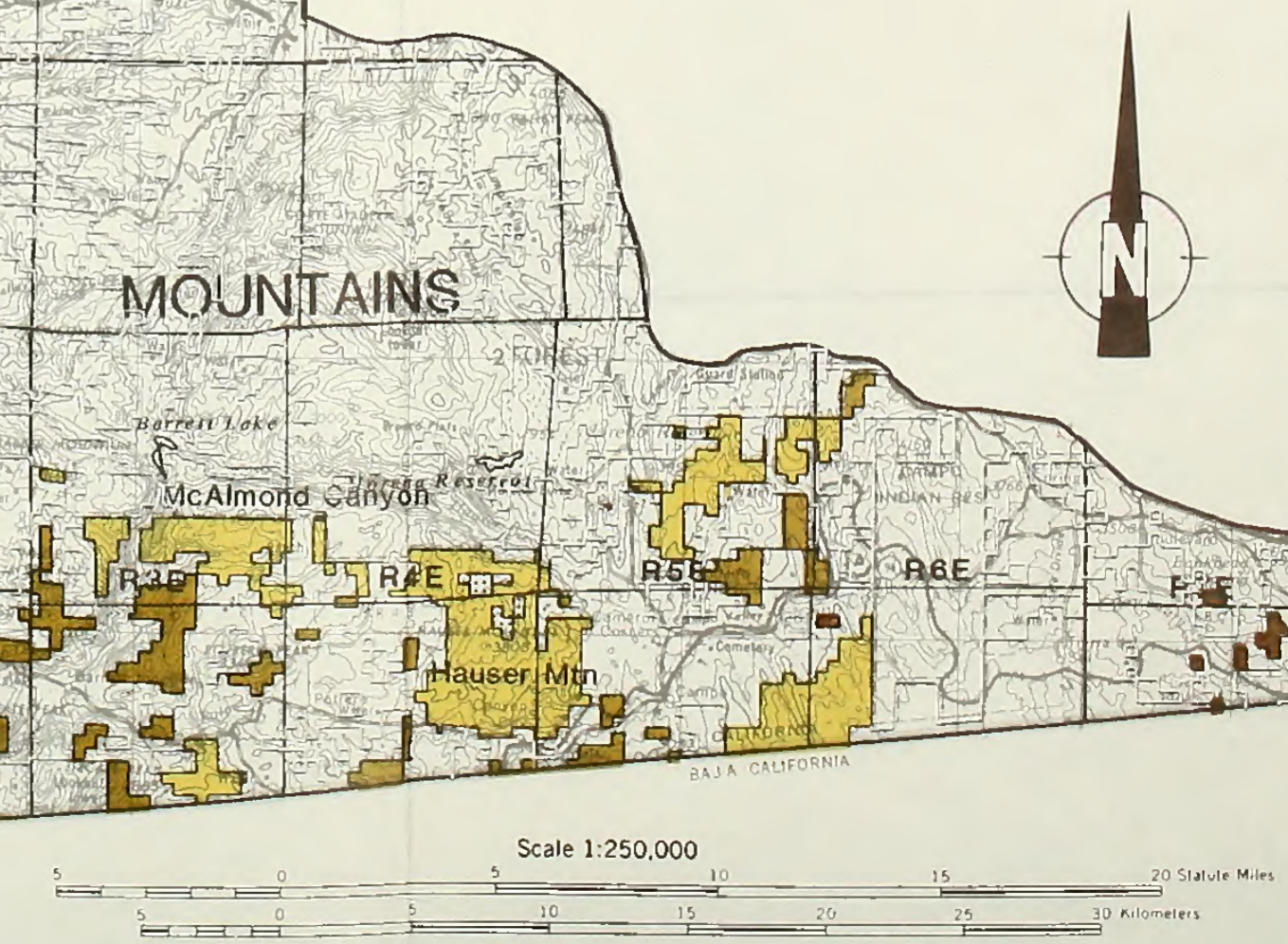
BEAUTY MOUNTAIN MANAGEMENT AREA

SAN DIEGO COUNTY MANAGEMENT AREA

- BLM Lands Not Available for Disposal
  - Proposed Acquisition
  - Management Area Boundary
- BLM LANDS AVAILABLE FOR DISPOSAL**  
 Disposal categories are defined in Appendix K
- Exchange or Sale
  - Exchange Only
  - Recreation and Public Purpose
  - Protective Disposal
  - Exchange (SKR Conditioned)
  - Forest Service Exchange

**Off-Highway Vehicle Designations**  
 Motorized vehicle use is limited to existing routes of travel, except on those parcels noted with the following symbols:

- \* Area Closed to Motorized Vehicle Use
- \*\*OHV Designations Shown on Map 2-4

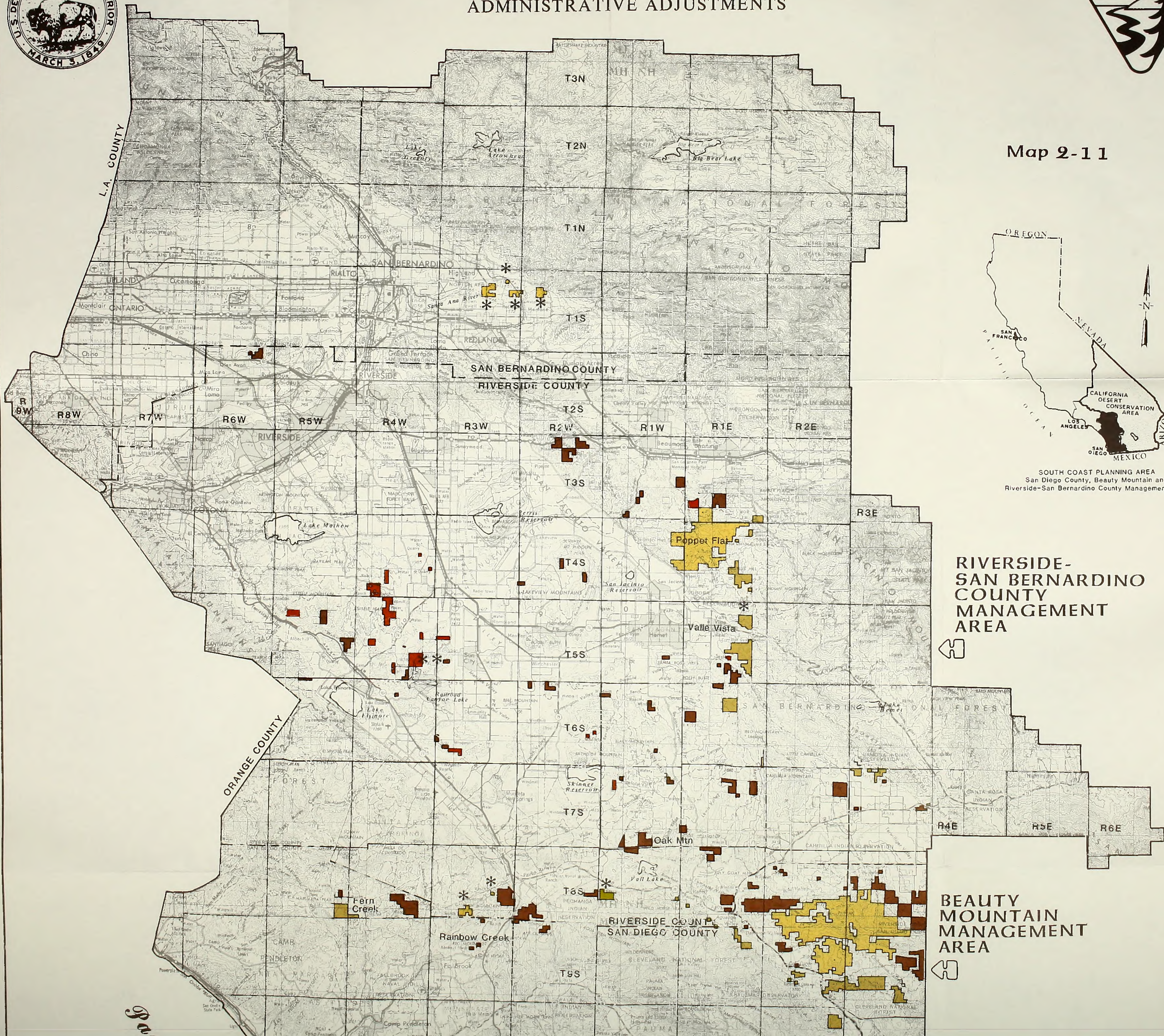




# ALTERNATIVE 2 ADMINISTRATIVE ADJUSTMENTS

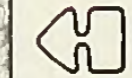


Map 2-11

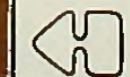


SOUTH COAST PLANNING AREA  
San Diego County, Beauty Mountain and  
Riverside-San Bernardino County Management Areas

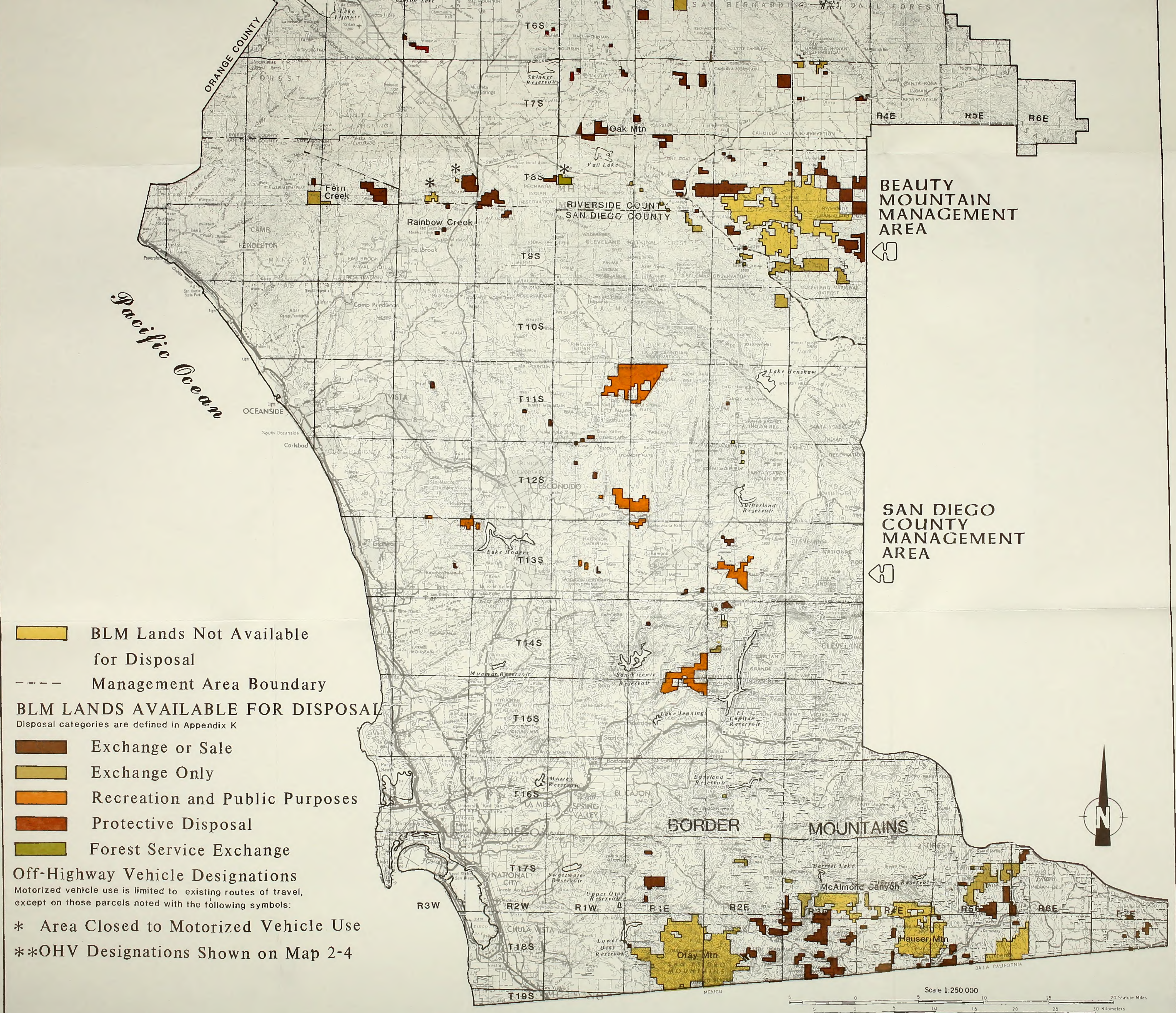
**RIVERSIDE-  
SAN BERNARDINO  
COUNTY  
MANAGEMENT  
AREA**



**BEAUTY MOUNTAIN  
MANAGEMENT  
AREA**



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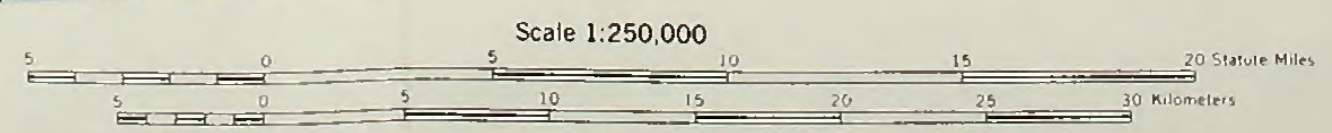
- BLM Lands Not Available for Disposal
- Management Area Boundary
- BLM LANDS AVAILABLE FOR DISPOSAL**  
Disposal categories are defined in Appendix K
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- Exchange Only
- Recreation and Public Purposes
- Protective Disposal
- Forest Service Exchange

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- \* Area Closed to Motorized Vehicle Use
- \*\*OHV Designations Shown on Map 2-4

**BEAUTY MOUNTAIN MANAGEMENT AREA**

**SAN DIEGO COUNTY MANAGEMENT AREA**

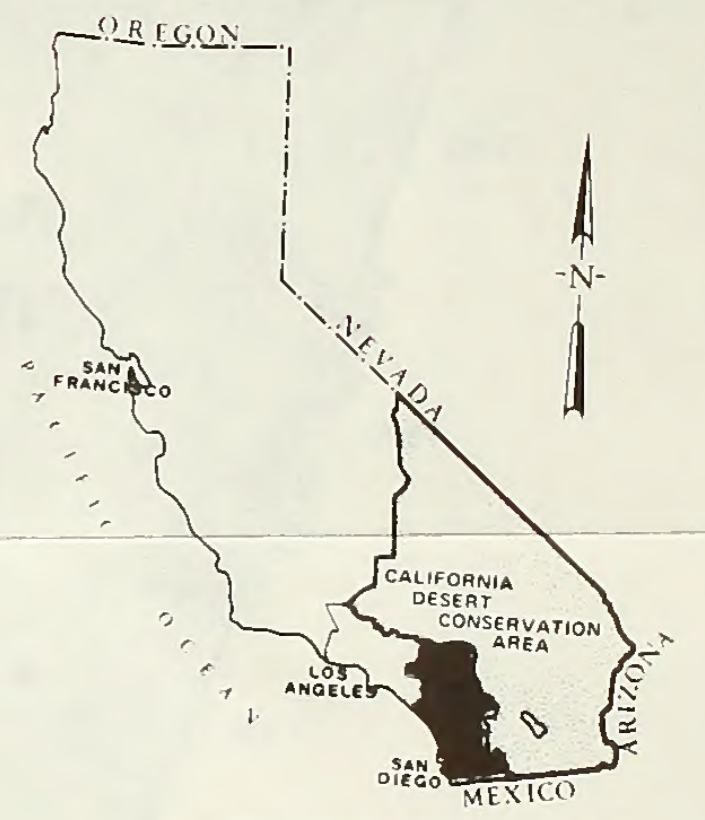
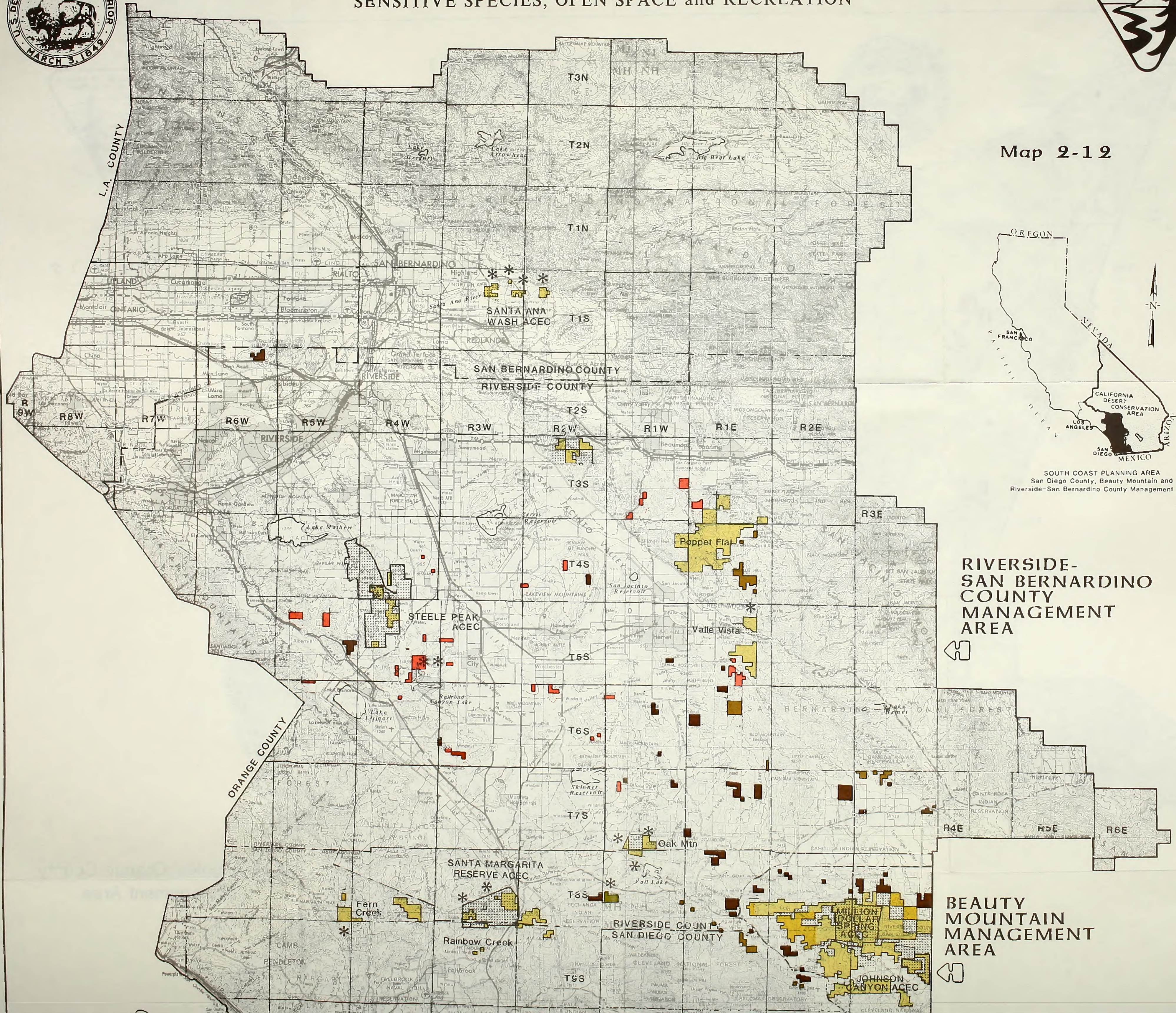




# ALTERNATIVE 3-THE PREFERRED ALTERNATIVE SENSITIVE SPECIES, OPEN SPACE and RECREATION

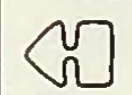


Map 2-12

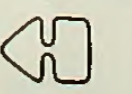


SOUTH COAST PLANNING AREA  
San Diego County, Beauty Mountain and  
Riverside-San Bernardino County Management Areas

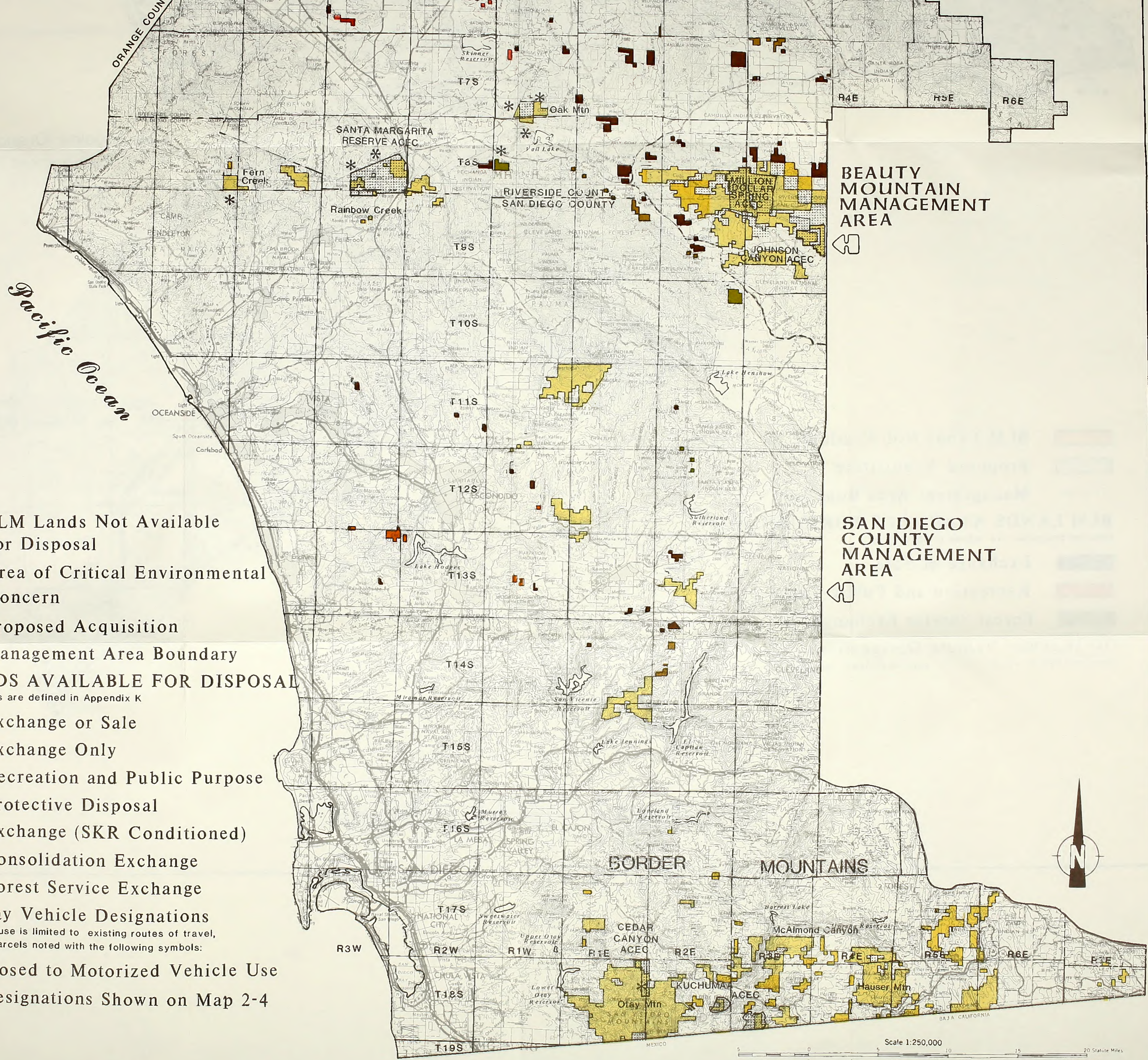
**RIVERSIDE-  
SAN BERNARDINO  
COUNTY  
MANAGEMENT  
AREA**



**BEAUTY  
MOUNTAIN  
MANAGEMENT  
AREA**







- BLM Lands Not Available for Disposal
- Area of Critical Environmental Concern
- Proposed Acquisition
- Management Area Boundary

**BLM LANDS AVAILABLE FOR DISPOSAL**  
 Disposal categories are defined in Appendix K

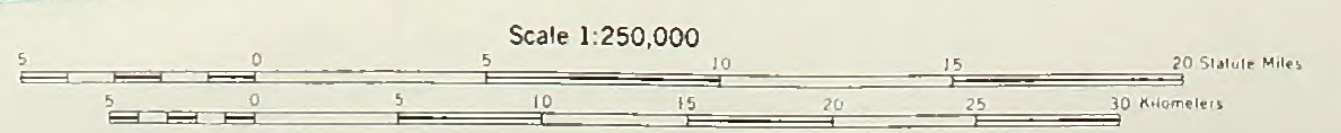
- Exchange or Sale
- Exchange Only
- Recreation and Public Purpose
- Protective Disposal
- Exchange (SKR Conditioned)
- Consolidation Exchange
- Forest Service Exchange

**Off-Highway Vehicle Designations**  
 Motorized vehicle use is limited to existing routes of travel, except on those parcels noted with the following symbols:

- \* Area Closed to Motorized Vehicle Use
- \*\*OHV Designations Shown on Map 2-4

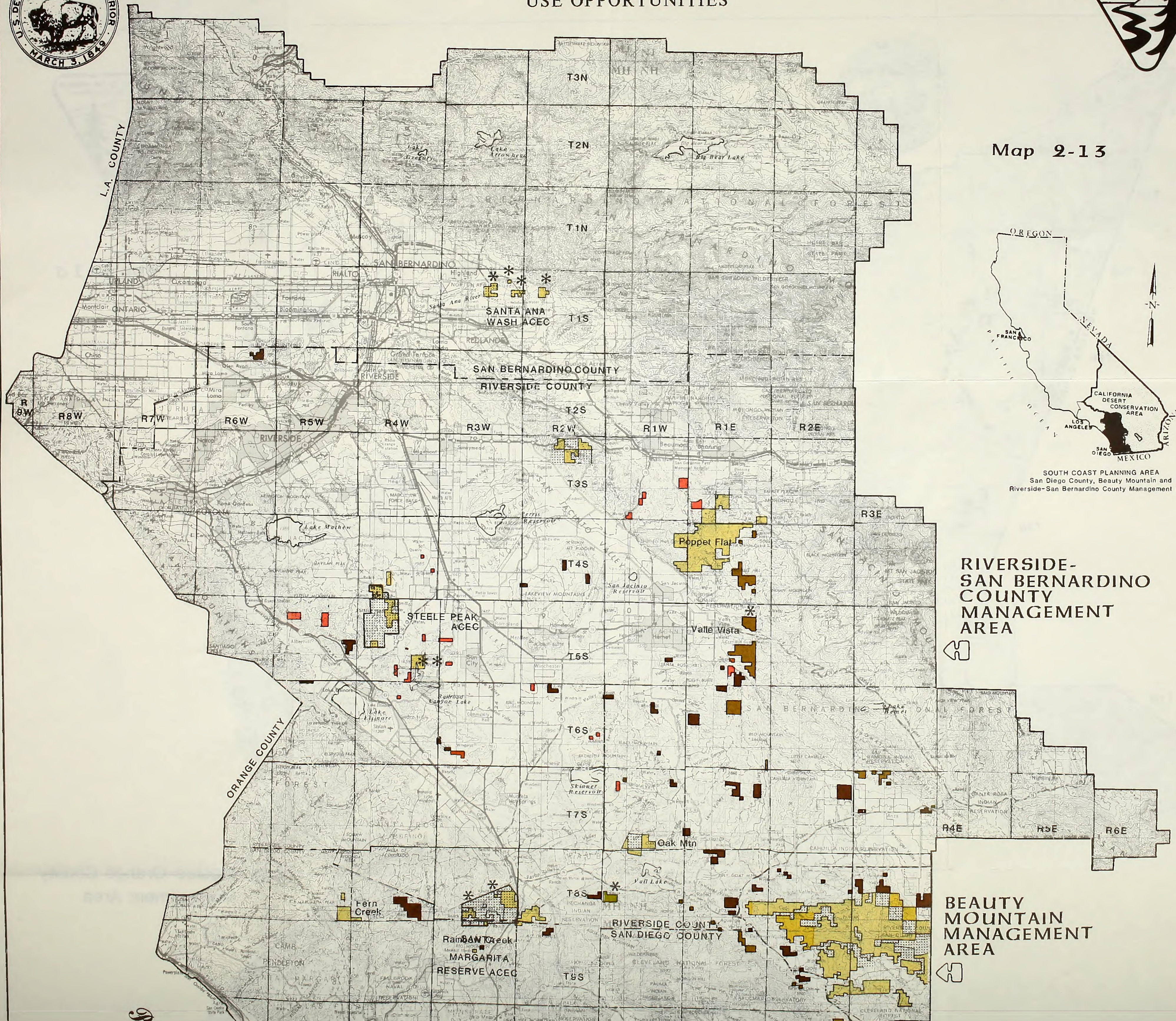
**BEAUTY MOUNTAIN MANAGEMENT AREA**

**SAN DIEGO COUNTY MANAGEMENT AREA**

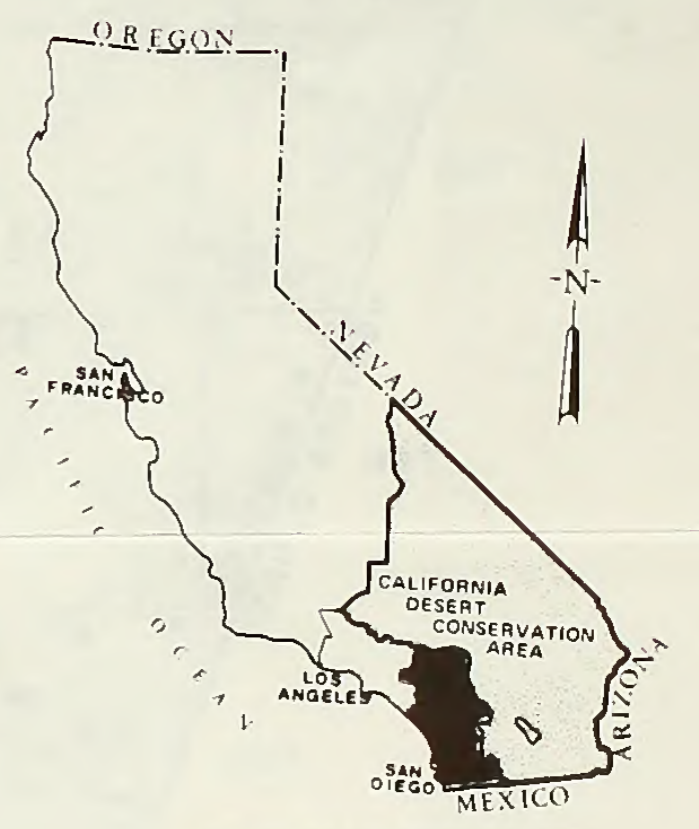




# ALTERNATIVE 4 USE OPPORTUNITIES

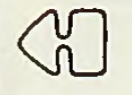


Map 2-13



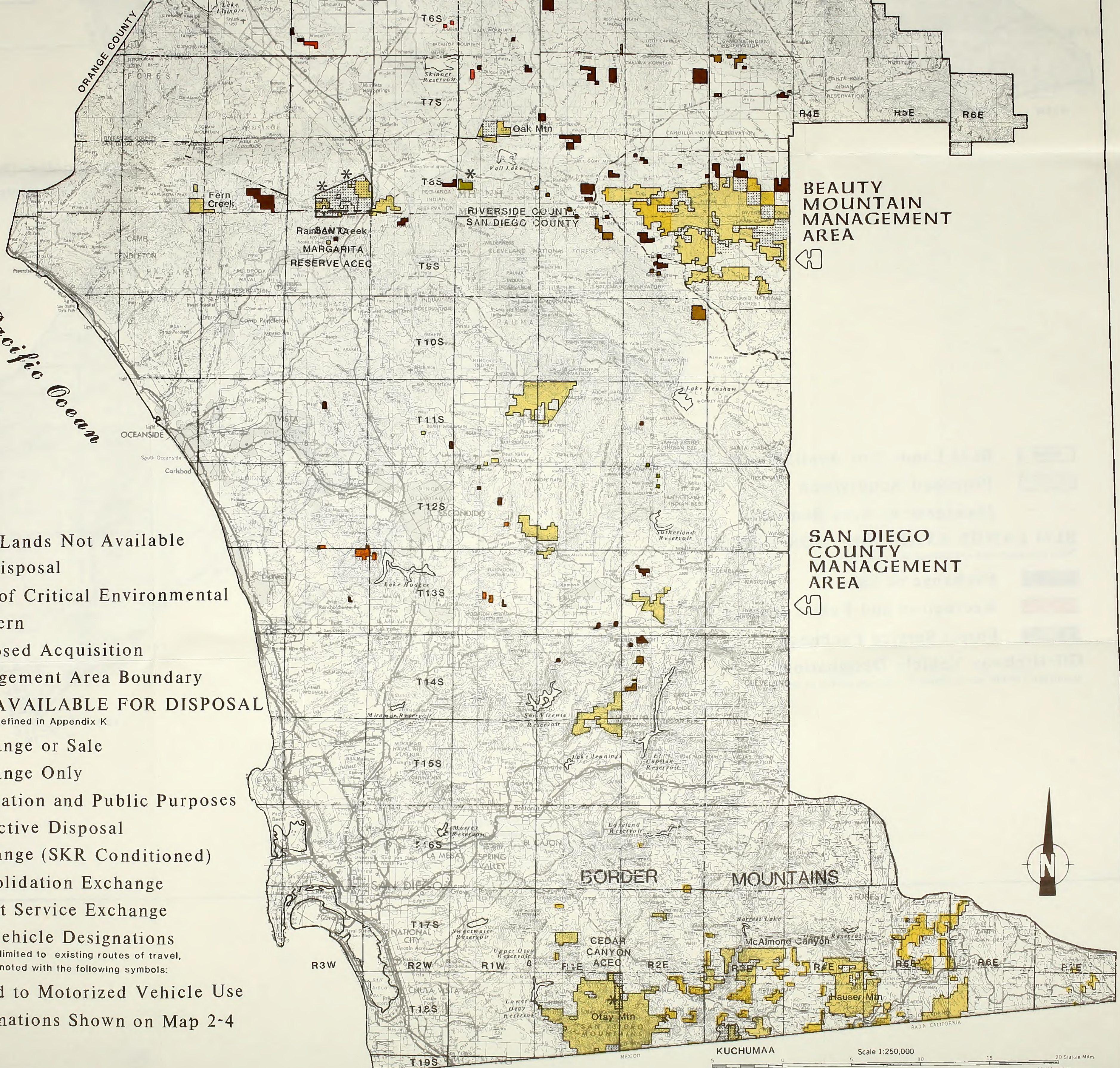
SOUTH COAST PLANNING AREA  
San Diego County, Beauty Mountain and  
Riverside-San Bernardino County Management Areas

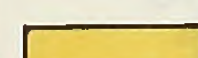










**RIVERSIDE-  
SAN BERNARDINO  
COUNTY  
MANAGEMENT  
AREA**



**BEAUTY  
MOUNTAIN  
MANAGEMENT  
AREA**





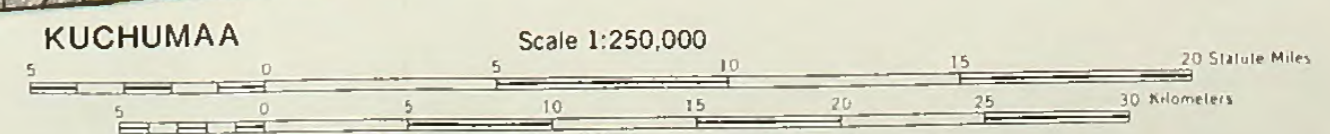
-  BLM Lands Not Available for Disposal
  -  Area of Critical Environmental Concern
  -  Proposed Acquisition
  -  Management Area Boundary
- BLM LANDS AVAILABLE FOR DISPOSAL**  
Disposal categories are defined in Appendix K
-  Exchange or Sale
  -  Exchange Only
  -  Recreation and Public Purposes
  -  Protective Disposal
  -  Exchange (SKR Conditioned)
  -  Consolidation Exchange
  -  Forest Service Exchange

**Off-Highway Vehicle Designations**  
Motorized vehicle use is limited to existing routes of travel, except on those parcels noted with the following symbols:

- \* Area Closed to Motorized Vehicle Use
- \*\*OHV Designations Shown on Map 2-4

BEAUTY MOUNTAIN MANAGEMENT AREA

SAN DIEGO COUNTY MANAGEMENT AREA





# ALTERNATIVE 1-THE PREFERRED ALTERNATIVE NO ACTION/CONTINUATION of PRESENT MANAGEMENT



Map 2-14

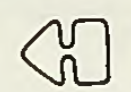


Los Angeles-Orange County  
Management Area





Los Angeles-Orange County  
Management Area



NONE BLM Lands Not Available for Disposal

NONE Proposed Acquisition

----- Management Area Boundary

**BLM LANDS AVAILABLE FOR DISPOSAL**

Disposal categories are defined in Appendix K

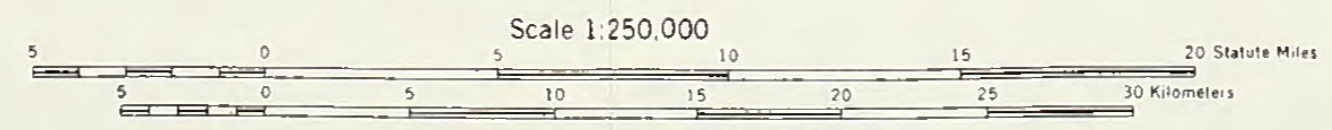
Exchange or Sale

Recreation and Public Purposes

Forest Service Exchange

**Off-Highway Vehicle Designations**

Motorized vehicle use is limited to existing routes of travel





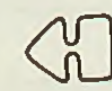
# ALTERNATIVE 3 SENSITIVE SPECIES, OPEN SPACE and RECREATION



Map 2-15



Los Angeles-Orange County  
Management Area





# ALTERNATIVE 4 USE OPPORTUNITIES



Map 2-16



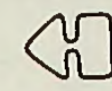
Los Angeles-Orange County  
Management Area









Los Angeles-Orange County  
Management Area



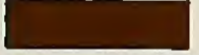
 NONE BLM Lands Not Available for Disposal

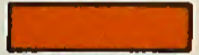
 Proposed Acquisition


----- Management Area Boundary

**BLM LANDS AVAILABLE FOR DISPOSAL**

Disposal categories are defined in Appendix K

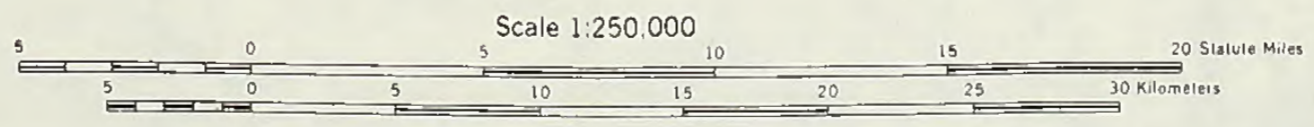
 Exchange or Sale

 Recreation and Public Purposes

 Forest Service Exchange

**Off-Highway Vehicle Designations**

Motorized vehicle use is limited to existing routes of travel



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